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ABSTRACT

The study discusses the development of attitudinal measures regarding community based residential facilities for retarded adults and presents results from two tests administered to 75 adults living near a facility housing 36 retarded adults. It is explained that interviews were conducted with the adults to determine their previous contact with retarded people, the number of children in their home, their permanence of residence, socioeconomic status, age, first language, level of education, religion, and religiosity. Results are said to demonstrate that the main concern was not related to the effect of retarded people on their neighbors, but rather to issues pertaining to operation of the group home. Safety and economic concerns are reported to be of secondary importance, with nuisance concerns of least importance. Implications for group home planners are discussed. (CL)

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RETARDED ADULTS IN THE COMMUNITY

AN INVESTIGATION OF NEIGHBORHOOD ATTITUDES AND CONCERNS

by

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ABSTRACT

The purpose of the study was to explore the nature of public attitudes toward community based residential facilities for retarded adults, and thus obtain data which would aid administrators in the planning of group homes and the development of community awareness programs.

The study was directed to determining the factors that affect attitudes toward integration, knowledge about mental retardation, and the specific concerns that people have regarding the presence of retarded adults in their community. Four areas of concern were determined: personal safety concerns, economic concerns, concerns about the retarded adult being a nuisance in the community, and concerns about the actual operation of the group home.

In order to determine these areas of concern an open-ended questionnaire was administered to twenty people from middle and middle-upper class areas of a large urban centre. Their responses were analyzed to develop a Likert-type test which could measure the extent of four separate areas of concern. A test of knowledge about mental retardation was also developed and validated using four known groups.

These two tests, together with a test of attitudes toward integration were administered to a random sample of seventy-five adults living in the vicinity of a community based residential facility housing thirty-six retarded adults. Respondents were blocked according to their sex and their proximity to the group home. A brief interview was conducted with all respondents to determine their previous contact with retarded people, the number of children in their home, their permanence of residence, socio-economic status, age, first language, level of education, religion, and religiosity.

The study showed that the main concern was not related to how retarded people might affect their neighbors; rather, to issues pertaining to how the group home was being operated. Safety and economic concerns were of secondary importance; nuisance concerns were least important. Some of these concerns were less for those who lived closer to the group home or for those who have previous contact with the retarded. Knowledge about mental retardation was correlated to attitudes toward integration and the concerns variables. Attitudes toward integration or the degree of concerns were not related to age, religion, sex, or any other variable pertaining to the neighbors' characteristics.

Implications for group home planners in establishing residences and developing community awareness programs have been outlined, as well as suggestions for further research.

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CHAPTER I

INTRODUCTION

Background to the Problem

Over the past ten years there has been a strong movement to provide more normal experiences for mentally handicapped persons in North America. This movement has been largely based on the "normalization" principle; that of

> making available to the mentally retarded, patterns and conditions of everyday life which are as close as possible to the norms and patterns of the mainstream of society (Nirje, 1969, p.181).

Services for the retarded in Scandinavia, where the normalization principle has been more firmly embodied in their ideology, have been used as a model for the development of services in North America. Smaller "integrated" residential facilities are being developed in conjunction with plans for deinstitutionalization. School systems have adopted "integration" or "mainstreaming" policies. Efforts are being made to provide non-sheltered employment for handicapped people (Gottleib, 1975). The normalization movement appears to have achieved considerable momentum.

Consistent with this trend toward normalization and integration policies, the Woodlands Parent Group (Note 1) is developing a schema for

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the expansion of services for handicapped people within the community.

Specifically, it is hoped that community-based residential facilities will be found for at least forty mentally handicapped adults from the Woodlands School population during 1978 (Note 2). The Community Living Society (CLS) has been established to develop the community's capacity to meet these goals.

Initial work by the CLS has been directed in three areas. First, the needs of the institution population are being examined to determine the service requirements of each individual. Second, community services, particularly generic services, are being examined to determine their present capacity and potential to meet these goals. Finally, a plan for developing community awareness is being developed.

It is well known that community acceptance is an important factor determining the success of such moves toward normalization (Berdianski and Parker, 1977). The presence of retarded people in the schools, in places of business, and in the community neighborhoods creates concerns for many people. Plans for group homes have been thwarted or delayed by community resistance. The efficacy or normalization, either in economic terms, or in terms of basic human rights, is not necessarily clear to the general public.

In developing a community awareness program three questions must be answered: "who is the audience?"; "what is the message?"; and "what is the best media?"

Murphy (Note 3) has identified four separate audiences:

"The Immediate Neighborhood" (p.3). This audience includes those people living close to CLS clients.

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Citizens Sharing Services. This audience includes "those other citizens of the community who will be sharing services - school, vocational, medical, recreational, and so on" (p.3).

"Associate or Support Groups - First Level" (p.4). This audience includes "interest groups...recognized as having primary concern for their interest area" (p.4), such as associations for the mentally retarded, vocational workshops, or associations for the handicapped.

"Associate or Support Groups - Second Level" (p.5). This audience includes service clubs, fraternal orders, churches, and various levels of government.

The present study was specifically directed to the first audience. It is the immediate neighbors "for whom the potential impact on their personal lives may appear to be the greatest" (Murphy, Note 3). The concern of this study was to ascertain what the message should be to neighboring residents of a proposed group home area. By surveying neighbors around an existing group home, information regarding their attitude toward retarded people, their knowledge about mental retardation, and their main concerns regarding the presence of the group home in their area was obtained which will be valuable to administrators in planning group homes and developing community awareness programs.

Statement of the Problem

The main problem of this study was to determine the effects of several independent variables upon the following dependent variables,

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and to examine their inter-relationships:

1) Attitude toward Integration - A factor of attitude toward the mentally retarded which projects the view that the retardate should be kept within the mainstream of society as opposed to segregation via institutionalization.

2) Knowledge about Mental Retardation - A measure of a person's factual knowledge about the incidence, definition, aetiology, prevention, treatment, and prognosis of mental retardation.

3) Concerns about a Neighborhood Group Home - A measure of the specific concerns which a person may have if a group home for mentally retarded adults were planned for their neighborhood. These concerns have been divided into four separate areas as follows:

i) Personal Safety Concerns
ii) Economic Concerns
iii) Concerns about the Retardate being a Menace
iv) Concerns about Operation of the Group Home

The following independent variables were selected for analysis in this study:

1) Proximity to the Group Home
2) Previous Contact with Retarded People
3) Presence of Children in the Home
4) Permanence of Residence

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5) Socio-economic Status (S.E.S.)

6) Age

7) First Language

8) Level of Education

9) Religion

10) Religiosity

11) Sex

The rationale for the selection of these variables and their operational definitions will be presented later.

Purpose of the Study

The purposes of this study were three-fold:

1) To provide data to aid administrators in establishing community based residences;

2) To furnish information necessary for establishing a community awareness program; and

3) To extend current theory and knowledge about the relationships in question.

Operational Definitions

Dependent Variables

Attitude toward Integration. This term was made operational through the use of a 24-item Likert-type scale (Appendix B).

Twelve of the items represent a "segregation via institutionalization" factor, determined by factor analysis of a scale measuring

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attitudes toward the mentally retarded (Efron and Efron, 1967). Factor analysis with orthogonal rotation (Varimax method) yielded this factor with loadings for all items from .32 to .64. Reliability (internal consistency) of this scale was reported by its authors to be .79.

The remaining twelve items are a "segregation in the community" factor determined by factor analysis of an attitude toward retarded children scale developed by Gottleib and Gorman (1975). Factor analysis yielded this factor with loadings between .36 and .76. Reliability is not known. Items were modified where necessary to reflect attitudes toward adults rather than children.

The specificity of the object referent is crucial in attitude studies (Gottleib, 1975); considerable research has demonstrated that the attitude score can be strongly affected by:

1) the severity of retardation and the chronological age of the mentally retarded referent, and

2) the manner in which the concept of mental retardation is presented to the subjects.

Thus, for the purpose of this study, a specific referent was highly desirable so that one could be more certain as to what the respondents were actually responding to. Since the Woodlands School population is the focus of present CLS plans, a general description of this population was used as a referent. In introducing the attitude scale then, the following descriptions were given to the respondents:

> By 'mentally retarded' we mean people similar to those who live in an institution for the retarded, such as Woodlands

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> School. Some of these people have only moderate problems in intelligence while others have more severe problems. Over half of these people can communicate verbally and can eat and dress with little assistance. Very few have problems in seeing or hearing and the majority can walk without difficulty.

It is felt that this referent would somewhat avoid the prominent stereotype of a malformed severely retarded person (Gottwald, 1970) without providing information regarding behavior which would predispose their attitude score. Further, it was not expected that this general information would affect their score on factual knowledge about mental retardation.

Concerns about a Neighborhood Group Home: This term was made operational through the use of a 56-item Likert-type test (Appendix C). Embedded within the test are four separate measures to determine the degree of concern for each of the following four concerns:

1) Concerns about the retarded affecting personal safety
2) Concern about the retardate being a menace
3) Economic concerns
4) Concerns regarding operation of the group home.

An elaboration of these four areas of concern and the procedures for the development of these measures are described in Chapter 3.

Knowledge about Mental Retardation: This term was made operational through the use of a 36 item test (see Appendix D). After a thorough review of the literature it was felt that there were no suitable tests available for this study, and so a test was developed for this purpose. Procedures used in its development are described in Chapter 3.

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Independent Variables

Proximity. Three groups were identified on the basis of their proximity to the group home. These were:

1) Immediate Neighbors - This group included all those adults living in the immediate vicinity of the group home, either on the same block or in the houses behind the group home which border its lot.

Adult was defined as those persons who are over eighteen years of age.

2) Intermediate Neighbors - This group included all adults living within a 1000 foot radius of the group home (except those included as immediate neighbors).

3) Distant Neighbors - This group included all persons living within a 1400 foot radius of the group home (except those included as immediate or intermediate neighbors).

The "group home" itself is located in a middle class area of Vancouver, B.C., zoned for single and multiple dwelling units. Specific characteristics for the area used in the study[1] and for Vancouver are presented in Tables 1 through 5.

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[1] The area used for the study is completely encompassed by census tracts BC001 and BC 15.01. Statistics for these two tracts were combined to compute the statistics for the area designated "study area" in Tables 1 to 5.

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Table 1

Percentage of Persons at Various Income Levels

Area	Income Levels ($1000's)					
	0	0-5	5-7.5	7.5-10	10-15	>15
Study Area	20.3	42.5	13.7	12.4	9.6	1.7
Vancouver	15.4	50.4	15.2	9.4	6.0	3.2

Note. Data taken from 1971 Census of Canada (Statistics Canada, Income E.A.Tape by Local Area G.V.R.D., Ministry of Supply and Services, 1971)

Table 2

Number of Occupied Private Dwellings by Tenure

Area	Total No. Occupied Private Dwellings	Tenure	
		% Owned	% Rented
Study Area	[a] 2420	77.3	22.7
Vancouver	[b] 382,045	58.3	41.7

Notes. a. Data from 1976 Census of Canada (Statistics Canada, Dwellings and Households, Occupied Private Dwellings by Structural Type and Tenure, Ministry of Supply and Services, 1978).

b. Data from 1976 Census of Canada (Statistics Canada CTDHMA 23, Ministry of Supply and Services, 1976, fiche 10).

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Table 3

Mother Tongue

Mother Tongue	% Persons Study Area [a]	% Persons Vancouver [b]
English	71.2	79.2
French	1.4	1.5
Japanese and Chinese	7.2	3.9
German	4.3	3.1
Greek	-	0.3
Italian	2.2	1.4
Native Indian	-	0.1
Netherlands and Flemish	-	0.9
Polish	4.3	0.3
Ukranian	1.4	1.0
Not Stated	1.4	5.0
Other	3.6	3.3

Notes. a. Data from 1976 Census of Canada (Statistics Canada, CTDEMA41, Ministry of Supply and Services, 1976, fiche 9).

b. Data from 1976 Census of Canada (Statistics Canada, Population: Demographic Characteristics - Mother Tongue, Ministry of Supply and Services, 1978).

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Table 4

Number of Families and Number of Children at Home

Area	Total No. Families	Number of Children at Home (% Families)					
		0	1	2	3	4	5 or more
Study Area [a]	2200	25.0	25.9	28.4	13.4	5.0	2.3
Vancouver [b]	96,250	41.4	24.2	19.2	9.6	3.9	1.8

Notes. a. Data from 1976 Census of Canada (Statistics Canada, CTFAMA11, Ministry of Supply and Services, 1976, fiche 4).

b. Data from 1976 Census of Canada (Statistics Canada, Families: Families by Number of Children, Ministry of Supply and Services, 1978).

Table 5

Marital Status

Area	Total Population	Marital Status (% Persons)				
		Single	Married	Widowed	Divorced	Separated
Study Area [a]	8550	45.7	45.7	2.8	1.6	1.0
Vancouver [b]		42.8	46.6	5.5	2.6	2.3

Notes. a. Data from 1976 Census of Canada (Statistics Canada, CTDEMA21, Ministry of Supply and Services, 1976, fiche 34).

b. Data from 1976 Census of Canada (Statistics Canada, Population: Demographic Characteristics - Mental Status, Ministry of Supply and Services, 1978).

The group home consists of two large facilities which were established in August, 1975 and house a total of thirty-six adults; eighteen men, eighteen women. Each facility is a town house containing four separate homes. Staffing is done by shifts. Per diem rate was $28.48 during 1977.

The residents are of all ages and all levels of functioning. While some are very mobile and less visibly handicapped, others are more severely retarded as well as physically handicapped.

Residents frequent businesses in the local shopping mall. Some residents use city transport; others use buses marked as Easter Seal buses or the Sunshine Coach.

The homes are newly constructed facilities and the interiors adhere to institution building code requirements. Additional parking spaces are the only externally visible requirement of the code.

It is appreciated that the group home itself is relatively large compared to most community-based residences, and indeed "size of group home" may be a factor in a study of this nature. However, the varied sex, age, and social adaptability of the residents deemed this group home to provide greater generalizability than other group homes considered. Of the eight possible group homes considered, seven were rejected. In some cases the clientele were not similar to the institution population. Others were rejected because they were located in an industrial area with few immediate neighbors or in an area with many other types of 'group home' residences, either for mentally ill persons or for specific religious sects.

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Previous Contact with Retarded People. One of three "degree of contact" scores was assigned to each respondent in the following manner:

1 = No previous contact with a mentally retarded person.

2 = Occasional contact; for example, a casual acquaintance with whom the respondent is in contact less than once per month.

3 = Considerable contact; for example, a member of the immediate family or a friend with whom the respondent is in contact more than once per month.

Gottwald's (1970) contact questions were used to determine this information.

Presence of Children in the Home. Respondents were asked: "Do you have any children living at home with you now?" If they answered affirmatively, there were further asked: "What are their ages?"

Their responses were categorized as follows:

1 = No children living at home.

2 = At least one child 12 or under living at home.

3 = At least one child over 12 living at home.

4 = At least one child 12 or under and one child over 12 living at home.

Permanence of Residence. One of three scores was assigned to each respondent in the following manner:

1 = Renting their home.

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2 = Owning their home 3 years or less.

3 = Owning their home over three years.

Three years is the length of time chosen to distinguish between those scoring "2" versus those scoring "3" as this is the length of time that the group home had been in operation.

Socio-economic Status (SES). Three questions were asked to determine SES:

"What is your usual occupation?"

"What kind of business or industry is it?"

"What are your major duties?"

The answers to these questions were translated to an interval score using the "Revised Socio-economic Index for Occupations in Canada" (Blishen and McRoberts, 1976), and finally, using the method suggested by Blishen (1967), the individual index values were converted to one of six socio-economic class scores.

Age. Respondents were asked to specify their age bracket. "Age bracket" scores were coded as follows:

1 = under 25 years

2 = 26 to 35 years

3 = 36 to 45 years

4 = 46 to 55 years

5 = over 55 years

First Language. By their response to the question, "What is your first language?", respondents were assigned to one of the following categories:

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1 = English was their first language

2 = English was not their first language

Level of Education. Based on their response to the question, "How far did you go in school?", respondents were assigned one of five "level of education" scores as follows:

1 = some high school

2 = completed high school

3 = some university/college training

4 = completed a university degree

Religion. Based on their response to the question, "What was the religious orientation of your family while you were growing up?", respondents were categorized as follows:

1 = no religion

2 = Catholic

3 = Protestant

4 = Other

Religiosity. Based on their response to the question, "To what extent do you still identify yourself as a member of the religious denomination of your family?", respondents were assigned one of three "religiosity" scores as follows:

1 = strongly active in the church

2 = identifies with a religion, but only rarely participates in church activities

3 = does not identify with any religious group

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Sex. Sex was coded as follows:

1 = Male

2 = Female

Research Questions and Hypotheses

In order to solve the problem and achieve the purposes of the study several research questions were identified. The first two sets of questions outlined below were of primary interest and were the focus of the study in establishing the design and methodology. These questions generate the specific hypotheses pertaining to this study. The latter set of questions, although equally interesting, is exploratory in nature and was included to provide insight for further research.

Effects of Proximity, Contact, and Sex

The first set of research questions involved the effects of three independent variables on the dependent variables:

1) Are there differences in "attitudes toward integration," the amount of "knowledge about mental retardation" possessed, and the four "concerns about a neighborhood group home" (dependent variables) among those people who are immediate neighbors, intermediate neighbors, and distant neighbors to the group home?

2) Are there differences in the above dependent variables among people with no previous contact with mentally retarded persons, those with some previous contact, and those with considerable previous contact?

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3) Do males differ from females in their scores on these dependent variables?

4) Do "proximity to a group home," "previous contact with the retarded," or "sex" interact in any way in their effect on the knowledge, attitude, or concern scores?

These research questions can be translated into the following research hypctheses state in null form:

1) There are no differences in the dependent variable mean scores for different levels of proximity.

2) There are no differences in the dependent variable mean scores for different levels of contact.

3) There are no differences in the dependent variable mean scores between males and females.

4) The effects of proximity on each dependent variable score do not change as a function of levels of contact.

5) The effects of proximity on each dependent variable score do not change as a function of sex.

6) The effects of contact on each dependent variable score do not change as function of sex.

7) The combined effects of proximity and contact on each dependent variable score do not change as a function of sex.

Relationships among Dependent Variables

The second set of research questions pertained to the relationships among certain dependent variables:

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1) Which concerns are most important for people when a group home for retarded adults is planned for their neighborhood?

2) Is knowledge about mental retardation correlated with attitudes toward integration or any of the four concern variables?

The null hypotheses corresponding to these two questions were as follows:

1) The mean of the scores reflecting the differences between any two concern variables is zero.

2) The product-moment correlation coefficient between knowledge about mental retardation and attitudes toward integration or between knowledge about mental retardation and any concern variable is zero.

Exploratory Analysis

The third set of research questions concerned the amount of variance explained by the remaining eight independent variables. The scope of this study was limited to analysing the first two sets of questions as its prime function; however, the additional independent variables were included for exploratory interest. These questions can be stated as follows:

1) Is there a difference in "attitudes toward integration," the amount of "knowledge about mental retardation" possessed, and the "concerns about a neighborhood group home" for those people who have young children living at home, versus those

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with older children living at home, versus those with no children living at home?

2) Do the dependent variable scores differ for people with varying levels of permanence of residence?

3) Do the above dependent variable scores differ for people with varying levels of S.E.S.?

4) Do the dependent variable scores differ for people of varying ages?

5) Do the dependent variable scores differ for people who speak English as their first language versus those who speak some other language as their first language?

6) Do the dependent variable scores differ for those people with varying levels of education?

7) Do the dependent variable scores differ for people of different religions?

8) Do the dependent variable scores differ for people with different levels of religiosity?

Organization of the Thesis

The first chapter includes a general background of the problem, a statement of the problem, the purpose of the study, operational definitions, and finally, the research questions and hypotheses. Chapter II consists of a review of the literature related to these research questions. In Chapter III the test development studies conducted to construct the measurement instruments used in the study are presented.

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The fourth chapter provides a description of the procedures used in conducting the study and analysing the results. Chapter V presents the results and an analysis of the data. The sixth and final chapter summarizes the findings of the study and sets forth conclusions and the implications for further study.

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CHAPTER II

BACKGROUND OF THE STUDY

The goals of the CLS to expand the community's capacity to provide services for retarded people within the community is consistent with normalization ideology. To understand their endeavors in proper perspective one must understand the historical development of residential services as well as the implications of the normalization principle. Wolfensberger (1969, 1972) has been prolific in these areas, and the first two sections of this chapter, which are devoted to this aim, serve only to simplify and condense his greater work.

With the development of community-based school and residential programs, research in mental retardation has shifted to the study of attitudes and attitude change. "A knowledge of attitudes is of importance in providing clues as to why certain programs exists, how professional services are delivered, what legislation becomes enacted, and generally, how the retarded person's life style is affected. The underlying assumption is that when attitudes toward retarded people are favorable, more enlightened treatment of them will ensue." (Gottleib, 1975, p.99). It is believed that success of CLS endeavors will largely be dependent on public attitudes. Thus, the third and fourth sections of this chapter are concerned with the nature of attitudes and the current research on attitude change.

The final section of this chapter is concerned specifically with the problems related to establishing a group home and the rationale for the present study.

Historical Development of Residential Facilities

Wolfensberger (1972) has identified several conceptual models representing different role perceptions of the retarded. These models, all deviancy based, have rather definite historical periods, and have formed the basis for the kinds of services rendered to the retarded. The normalization principle can be viewed as an alternative to these other models.

The early pioneers, such as Seguin and Howe, who established services for the retarded between 1820 and 1850, saw the retardate as a developing person (Pritchard, 1960). It was felt that with good educational techniques, adaptive and social skills could be learned which would enable the student to function in society. Consistent with this notion, services were provided within the community, sometimes based on a family structure (Fernald, 1893, p.206), and schooling was seen as a right (Howe, 1848, p.52).

This initial period, when institutions were opened with a sense of pride and sincere hope, was not viewed as successful. Between 1870 and 1880 the focus changed to custodial care, and an attitude of benevolent protection prevailed (Rogers, 1888). The retardate was perceived

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as an object of pity, a subhuman organism requiring special care and attention.

Isolation and enlargement became natural corollaries of this protective model. In an attitude of "keeping them with their own kind," away from the "pressures of society," institutions were moved away from the population centers to isolated rural surroundings. Englargement was justified on the basis of providing city-like communities or more homogeneous training groups.

The protection model was short-lived; by 1900 the goal was not to protect the retardate from society; rather, to protect society from the retardate. A model based on the retardate as a menace to society developed. The widespread use of mental tests, knowledge of genetic transmission, and evidence regarding the spread of disease all contributed to this change in ideology (Fernald, 1915).

The perception of the retardate as a diseased person also developed at this time. Retardation was feared as a rapidly increasing epidemic (Fernald, 1915). Preventative marriage laws (Beedy, 1895), sterilization laws (Report from States, 1895), and segregation laws were each passed in turn. Permanent commitment of retarded persons to institutions became the normal procedure.

While all of these measures failed to diminish the growing numbers, emphasis shifted toward frugality. Warehousing, the inexpensive "storage" of large numbers of people in "plain, substantial buildings, with no filagrees" (Johnstone, 1908, p.323) became the usual mode.

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By 1925, leaders in the field realized that their preventative measures were ineffectual, and that retardation was not the menace originally perceived. But the natural progression back to a developmental model, toward a normalization model, did not happen. First, professionals in the field had indoctrinated the populace for thirty years. Second, the failure of the institutional model created pessimism, and professional interest shifted. The depression and then World War II inhibited progress and diverted attention away from the problem. As a result, the role perceptions of the retardate as a menace, as a diseased person, or as a subhuman organism still underlie our present services. Although the rationale of the early twentieth century is no longer viable, many people continue to operate with the same underlying values.

Normalization Ideology

It is this historical framework which staged the development of the normalization principle in Denmark and Sweden. Growing from the demands for standards, facilities, and programs by strong parent movements, and through the works of Bank-Mikkelson (1969), Grunewald (1969), and Nirje (1969), the normalization principle came into being as a goal for new services. Legislation in Denmark and Sweden serves as an expression of normalization intent.

This legislation (Danish Act No. 192, 1959) (Swedish Statute No. 940, 1968) states three important rights consistent with more normal treatment of the retarded. First, reception of services is seen as a

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right. If there is a need for a service, there is a right to receive it, and only for the length of time that that need exists. Furthermore, there is a right to the provision of these services at home; parents are not forced to choose institutionalization as the only option to home care. Second, schooling is seen as a right. This right includes preschool years through to the age of twenty-one. Finally, there is a right to alternative accommodation; the medical service model is not seen as being practical for all individuals. Thus, the Scandinavian countries have challenged the previous role models for the retarded and have created action-oriented legislation to facilitate change toward normalization.

The legislation of these Scandinavian countries does not embody the entire framework of normalization intent; rather, it only represents the perceptible and more easily legislated corollaries of the principle. In the past decade, many have perceived the women's liberation movement as being centered around the legitimacy of women working outside the home or of the legislated issues of equal opportunity or equal pay. But to many others, an awareness developed of the many interpretations and social structures attributed to women living in a society with omnipotent sex-role socialization. Acquiring this awareness is not a linear process of learning all the implications of such socialization; rather, it occurs as one changes their ideology, and the new beliefs, attitudes, and interpretations which comprise the new ideology often naturally and quickly become a part of that person. Feminists call this experience a "raising of consciousness." Appreciating normalization ideology is a

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similar process, and thus it is very difficult to describe the many subtle implications of the principle.

When it is stated that normalization means treating the retarded person as normally as possible the logical question is "what constitutes normal treatment?" Certainly any model of normal treatment would involve individual values. To discern the implications of the normalization principle then, one must view the normalization principle as a change process. Just as the feminism model is based on a change away from sex-role stereotyping, so the normalization principle is based on a change away from deviant role perceptions. Only from this deviant/non-deviant framework can one begin to give order and clarification to what is implied by normal treatment.

Outlined below are the implications of the normalization principle, presented in four general categories:

1) non-deviant social interpretations;
2) non-deviant structures;
3) social and physical integration; and
4) provision of human rights.

Wolfensbergerand Glenn (1975) originated and more fully described many of the definitions used in this section.

Non-deviant Social Interpretations

There are certain elements which are culturally interpreted by society as being deviant, and thus increase the retardate's stigma. To achieve integration at a functional level one must not only normalize the presentation of the retardate, but also normalize the percept-

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ions of society.

Building Label. Labels which suggest deviancy such as "Opportunity Rehabilitation Workshop" or "Retarded Children's Hostel" increase perceived deviancy. "Futuristic Industries Ltd." is a desirable name for a 'sheltered workshop'.

Building Perception. The appearance or history of a building can increase community perception toward deviancy. An old prison used as a residence for retarded adults, or, more subtly, a vocational program in a residential family home would increase perceived deviancy. Size, neighborhood harmony, and function all contribute to building perceptions.

Physical Context. A setting should be close to socially integrative physical resources, such as stores, movies, parks, libraries, post offices, churches, etc.

A facility must also be in a location consistent with its function. For example, a workshop should be in an industrial area, a hostel in a residential area.

Deviant Labels. Deviant perception is increased by labels implying inferiority - vegetables, low-grade, retarded, disabled, etc. Age-inappropriate labels also increase perceived deviancy; for example, retarded adults are often referred to as "kids".

Deviant Staff Contact. Often a large percentage of a staff consists of habilitated deviant persons, persons with physical or mental problems, or persons with grossly atypical appearance. Although it is appreciated that such persons often have a more introspective under-

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standing of deviant-associated problems, it is important to consider whether the staff contact facilitates integration.

Manpower Identity. Staff manpower must be appropriate to the needs of the people served. For example, medical personnel operating a residential facility would increase perceived stigma.

Non-deviant Structures

Many programs structure a person in a fashion consistent with persons of a higher or lower age or some deviant role model. While these structures also affect social interpretation of the person, they also directly affect their behavior, increasing the degree of deviancy (Vail, 1967).

Age-appropriate Facilities. Often buildings for adults are presented with a childlike decor, or vice-versa. The external appearance of the facility must be appropriate for the age of the person served.

Age-appropriate Possessions. Not only is the right to personal possessions important, the retarded should be encouraged to value age-appropriate possessions. For example, an adult should not be encouraged to collect hockey cards, race cars, or dolls. Some possessions, such as pets, sports equipment, or a T.V. are appropriate for all ages.

Age-appropriate Activities, Routines and Rhythms. There are many important aspects of this implication of the normalization principle, described thoroughly by Nirje in Changing Patterns in Residential Services (1969, p.181-185).

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In general, one should consider whether the daily, weekly and yearly activities and routines of the person served match the normal day of his peers.

Appropriate Personal Appearance. Dress, grooming and general personal appearance which are most consistent with the current norms for a person's age group tend to decrease perceived deviancy. Also, there should be an effort to modify those aspects of appearance which are culturally devalued. For example, strabismus can be corrected surgically; prosthesis can be made inconspicuous; obesity can be altered.

Groupings. Living groups should be of the same size, nature and composition as that of non-deviant peers. This is often violated when children and adults are treated in the same facility and in the same context. Groups of varying age-appropriate behavior also place unjustifiable restrictions on a more advanced retarded person.

Human Management Model. The human management model (e.g. medical, developmental, vocational, corrective, psychiatric) must be appropriate to the needs of the person served.

Social and Physical Integration

In addition to normalizing the perceptions of society and the presentations of the retarded person, it is also necessary to provide opportunities for contact, both in the physical and in the social sense.

Physical Integration. A physically integrated setting allows for, or even facilitates, social integration and thus maximizes a

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peron's participation in the mainstream of society. Besides physical context, physical integration involves the following dimensions:

1) Proximity - An optimally located facility is where the center and emphasis of services is located or very close to the main distribution of the population.

2) Access - An optimally located facility has access in terms of speed and convenience to transportation routes enabling closer contact to the public as well as enabling people to reach their home locales.

3) Dispersal - Retarded people should not be congregated in numbers larger than the surrounding community can absorb and integrate.

Socially Integrative Social Opportunities. There must be regular opportunities for normal integration in these areas:

1) Residence
2) Recreation
3) Social Interactions (e.g. worship, shopping, routine aspects of living)
4) Education, training, or work.

Support of Generic Agencies. Generic services are those services aimed at serving citizens in general rather than a specific disability group. To minimize segregation and stigmatization, to reduce the barriers between agencies, and to avoid duplication of services, generic agencies must be supportive of integrating all of the non-specialized functions of the specialized agency. Most services of

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health, education, welfare, or employment could be delivered to all people through generic services. For example, in a school situation the mentally retarded can function in most regular classroom activities, so only specialized functions relating to academic activities should be served by a special educator. Intermediate systems are also responsible for providing the impetus for public education.

Provision of Human Rights

Personal Autonomy. The agency should actively encourage those rights which foster independence. These include such opportunities as using mail and telephone services, operating a vehicle, using public transit, or maintaining a private home. A person's autonomy is increased through the right to verbal expression, and the opportunity to exercise choice and make decisions in regular daily life.

Legal Rights. The retarded should be encouraged to exercise their legal rights to vote, own property, testify and stand trial, and engage in legal contracts.

Education and Work. The retarded should be made aware of their rights to an education, and to apply for the work of their choice.

Sexual and Marriage Rights. Opportunities for heterosexual socialization are essential, and options should be made for sexuality and/or marriage.

The above outline includes only a basic description of the implications of normalization. A more complete description of these implications is included in Normalization (Wolfensberger, 1972) or Program

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Analysis of Service Systems, (Wolfensberger and Glenn, 1975).

The Nature of Attitude Studies

Attitude is a construct used as a variable in psychology to predict and explain consistencies in social behavior. The construct attitude "entails an existing predisposition to respond to social objects which, in interaction with situational and other dispositional variables, guides and directs the overt behavior of the individual." (Shaw and Wright, 1967, p.2). 'Attitude' differs from 'belief', which implies an acceptance at some level of probability (Anderson and Fishbein, 1965), or 'concepts', the act of placing two or more events into a relationship, (Harvey et al, 1961), in that attitude involves an evaluation of the preferability of a certain object or characteristic. Although attitude is similar to 'motive' in that both constructs "refer to the directionality of behavior, but not to behavior itself, [it differs in that it] is not characterized by an existing drive state" (Shaw and Wright, 1967, p.5).

Shaw and Wright (1967) outline the following characteristics of attitudes:

1) Attitudes are based on evaluative concepts regarding characteristics of the referent object and give rise to motivated behavior.
2) Attitudes are construed as varying in quality and intensity (or strength) on a contiuum from positive through to neutral to negative.
3) Attitudes are learned rather than being innate or a result of constitutional development or maturation.
4) Attitudes have specific social referents, or specific classes thereof.
5) Attitudes possess varying degrees of interrelatedness to one another.
6) Attitudes are relatively stable and enduring. (p.6-9).

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Formal definitions of attitude vary considerably. This variance is due to the degree of specificity of the referent (Shaw and Wright, 1967, p.2). While some theorists (Krech, Crutchfield, and Ballachey, 1962) believe attitudes have a specific referent, others (Eysenck, 1947) define attitudes as a generalized disposition of a person. In this study attitudes will have a highly specific referent, namely, mentally retarded adults.

Another variance in definition warranting discussion for the purpose of this study concerns the composition of attitude. While some definitions subsume a behavioral component (Triandis, 1964), most theorists define attitudes with an affective, cognitive and behavioral component (Shaw and Wright, 1967). When we consider one's attitude toward the retarded, we assume that people make an evaluation (affective component) based on their beliefs or evaluating concepts which they learned (cognitive component) regarding retarded people, and that this evaluation will elicit certain responses or motives (behavioral component). Appreciation of this three-component nature of attitudes is important. It may well be that people avidly support normalization concepts on an affective and cognitive level, but there may not be the link to the behavioral component when they are faced with retarded adults living in their neighborhood.

Most studies regarding attitudes toward the mentally retarded have been unifactorial measures of attitude favourability. Noteworthy exceptions are the studies of Jordan (1971), Efron and Efron (1967),

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and Gottleib and Corman (1975), which have employed multifactorial attitudinal measures. Multifactorial instruments enable a researcher to directly examine more specific issues rather than a pervasive generalized attitude.

Consistent with the above discussion the following definition will be used as a basis for the position taken in the present study:

> Attitude is a relatively enduring system of affective evaluative reactions based upon and reflecting the evaluative concepts or beliefs which have been learned about the characteristics of a social object or class of social objects (p.10) ... [and] predisposing the individual to behave in a certain manner toward the attitude object (Shaw and Wright, 1967, p.13).

Attitudes Toward the Mentally Retarded

The Object Referent in Attitude Studies

Gottleib has summarized the research regarding the attitude referent in attitude studies (Gottleib, 1975), and indicates the critical implications regarding the specificity of the referent. The label used to describe a person, such as slow learner versus mentally retarded person (Hollinger and Jones, 1970), or the manner in which the retarded person is described (Meyers et al, 1966) greatly affects the attitude score. Jaffe (1966), for example, found that adolescents responded less favorably toward the label 'mentally retarded person' than they did toward a descriptive sketch of a particular retarded person. Belinkoff (1960) suggests that parents are more willing to accept their child as "slow" rather than "retarded" based on his finding of improved recruitment when an experimental education program was renamed from

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"Mental Retardation Project" to "Special Education Project." Thus, specificity regarding severity of mental retardation and the manner in which the concept is presented greatly affects attitude score.

Gottwald (1970) showed that the public generally associated the phrase "mentally retarded" with birth injury, defects, brain damage, or generally, severe mental retardation. Only 1.1% of Gottwald's sample (n=1515) attempted to differentiate different levels of mental retardation. Begab (1968) also found that people tend to view retarded people as being sick or physically handicapped. Therefore, in the absence of a specific referent it appears that most respondents will conceptualize a severe form of mental retardation.

Public Attitudes Toward the Retarded

There have been many studies relating public attitudes toward the retarded to raters' characteristics. While sex and age are more definite determining factors, the effects of the level of education and socio-economic status (S.E.S.) are not as clear.

Sex as a determinant has been reviewed by Greenbaum and Wang (1965), who concluded that females generally express more favorable attitudes. Harasymiw (1971) supports this conclusion. In Gottwald's study (1970) women were more aware of aetiology, but did not differ from men in their assessment of social worth of retarded people. Women were less optimistic in their estimates of the number of retarded capable of "normalized activities" such as using public transportation or having a regular job. Similarly, Gottleib and Corman (1975) found that women expressed more favorable attitudes regarding "positive stereotype

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toward the mentally retarded," but did not differ in a factor regarding "segregation in the classroom."

Age as a factor in attitude studies generally indicates that younger subjects have more favorable attitudes (Gottwald, 1970; Hollinger and Jones, 1970; Gottleib and Corman, 1975).

Level of education is not a well-determined factor in attitude studies. While Gottwald (1970) reported a positive correlation of positive attitudes to level of education, Greenbaum and Wang (1965) and Gottleib and Corman (1975) do not support these findings. The level of education of employers was considered as a factor in determining their work-related attitudes toward the retarded, but also with mixed findings (Phelps, 1965; Cohen, 1963).

There are also mixed findings regarding S.E.S. and attitudes. While Gottwald reported no significant differences for various income levels, Greenbaum and Wang (1965) reported that low S.E.S. subjects responded with more favorable attitudes.

The "Contact" Hypotheses

Research has more recently been focused on the *contact hypotheses* which is shared by many special educators (Christoplos and Reny, 1969). The tenet of this hypothesis is that the more contact a person has with a retarded person, for example, regular class versus segregated class, the greater the probability of more favorable attitudes. Harth has summarized the findings of this research:

> First, it appears that bringing about significant positive changes in attitudes is not a simple matter. The research

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> seems to indicate that rather direct, well-organized procedures are required (Strauch, 1970; Chennault, 1967; Quay et al, 1961; Begab, 1969). Mere exposure to retarded people or telling people about mental retardation does not appear to be sufficient. (Harth, 1977, p.13).

Issues Related to Establishing Group Homes

When developers propose a certain house to become a group home residence for retarded people and let that be known to the community, often considerable anxiety results. This anxiety, generally based on safety and security needs, often results in open resentment. It is not uncommon for neighbors to rally together to sign petitions, hire attorneys, or solicit the support of politicians and community leaders. (Berdiansky and Parker, 1977). Judiciary or local government agencies often become involved and the plan is then stymied by minor technicalities such as local zoning or fire regulations.

In a survey of fifty-one group home managers, Berdiansky and Parker (1977) found the following issues and concerns consistently being raised by neighborhood residents regarding proposed group homes:

> 1) Danger of group home residents to the community
> 2) Sexual deviance
> 3) Sexual-racial composition of the home
> 4) Supervision of group home residents
> 5) Impact on property values
> 6) Reason for deinstitutionalization
> 7) Why their neighborhood was selected
> 8) Danger to group home residents
> 9) Sterilization
> 10) Permanence of group home.
>
> (Berdiansky and Parker, 1977, p.10).

These issues, which were raised in 24 to 28 percent of the cases, and resolved in less than half the cases, created considerable turmoil and

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often delayed or prevented the group homes from opening.

Furthermore, these fears are not empirically founded. Eyman and Call (1977) have indicated that "physical violence, property damage, and self-violence are the discriminating problems much more common for institutionalized individuals than for those living in the community " (p.42). As their results are based on cross-sectional data, one cannot make statements as to whether placement generates maladaptive behavior, or vice-versa. However, it is generally accepted that maladaptive behavior is the prime reason for institutionalization (Eyman, Dingman, and Sabach, 1966).

One approach to overcoming resistance and avoiding initial community and legal conflicts is the so-called *Machiavellian* approach (Siegleman, 1976). Plans for a group home are kept confidential and eventually presented as a *fait accompli*. Developers using this approach believe that public awareness is self-defeating and generates organized resistance. Having great faith in the *contact hypothesis*, they believe that once community members experience living near retarded people, their attitudes will improve.

Proponents of a more open approach believe that such methods are devious and contrary to the rights of an open society. The *Machiavellian* approach leaves the home vulnerable to censure.

With the advent of more community-based facilities and programs, research requirements are becoming more specific. Recent attitude studies have been too generalized, and as a result, the inferences that have been drawn are inconsistent (Harth, 1977), due either to lack of

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referent specificity (Gottleib, 1975) or the practice of conceptualizing attitudes as unidimensional(Gottleib and Corman, 1974). More information regarding community attitudes is necessary to help developers formulate strategies for planning group homes, meeting community resistance, and developing public awareness.

Summary and Implications for the Present Study

By tracing the historical development of residential facilities for the retarded from the early nineteenth century, it has been shown that although facilities were originally based on a developmental model, their later development was founded on several deviancy-based models. These models engendered attitudes which are still prevalent today and are inconsistent with viewing the retardate as a developing person. It was further shown that a transition away from deviancy-based models to a normalization model involves a broad conceptional framework, a new ideology with many implications underlying the entire value system of a society.

Examining this normalization ideology involves a study of attitudes, a construct used to predict and explain consistencies in social behavior.

Studies of attitudes toward the mentally retarded have indicated that age and sex are consistently related to attitudes, but most other variables have not been consistently related. Further, it has not been shown conclusively that contact with the retarded produces more favorable attitudes. It appears that these studies have usually been limited due to over-generalization or lack of referent specificity.

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Thus, to examine community concerns about integrated residential facilities it is necessary to restrict the study to specific issues and maintain a specific referent. Several key issues have been identified (Berdiansky and Parker, 1977); it is now necessary to examine these issues directly and determine their relationship to various relevant variables.

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CHAPTER III

DEVELOPMENT OF INSTRUMENTS

In order to answer the research questions posed in Chapter I and fulfill the purposes of the study it was necessary to construct two separate instruments. The purpose of the first instrument was to measure factual knowledge about mental retardation. The second instrument was designed to determine what a person's main concerns are with respect to having a group home for retarded adults in their area. To validate these instruments and determine their reliability for use in the main study, it was necessary to conduct two separate test development studies. These two test development studies are presented in this chapter.

Knowledge Test Developmental Study

The purpose of this developmental study was to develop a valid and reliable test of knowledge about mental retardation that could be used in studies with both lay and professional persons. Knowledge about mental retardation is defined in this study as an understanding of the objective facts about mental retardation, and in this respect the test must not include an affective attitude component.

A review of the literature revealed that there are few valid measures of factual knowledge about mental retardation. To be valid it

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is assumed that the test should represent a well defined domain of content and be able to discriminate between those with high and low degrees of specific knowledge about mental retardation. Tests used in recent studies, however, have been based on a content domain of only misconceptions about mental retardation and have not shown evidence of construct validity.

For example, the twelve item true/false test used by Mahoney and Pangrac (1960), was based on the popular misconceptions about mental retardation submitted by the 1926 National Committee for Mental Hygiene (Winthrop and Taylor, 1957). Hill and Hill (1976), who extended their test to sixteen items found that over 5% of the American Academy on Mental Retardation respondents did not agree on six of the answers.

Peterson's (1970) thirty-seven item multiple choice test reflects a more complete domain of content but was not suitable for the present study as it is area specific, out of date, and couched in professional language.

Thus, it was proved necessary to develop a test of knowledge about mental retardation for use in the present study.

Method

A four by six content domain matrix was specified based on the incidence, definition, etiology, prevention, treatment, and prognosis of mental retardation, again the first four levels of the Taxonomy of Educational Objectives (Krathwol, Bloom, and Masia, 1956). Items involving professional knowledge, general knowledge, and misconceptions about mental retardation were generated to form a forty-eight item test, with two items representing each cell of the content matrix.

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Five judges reviewed the content domain and the individual items on the test. These judges were professors in the special education department at the University of British Columbia who had considerable knowledge about mental retardation.

Two separate groups were selected for initial item screening. One group consisted of twenty-six undergraduate students with experience and introductory course work in mental retardation. The other group consisted of twenty-five adults attending a government sponsored grade twelve up-grading program. This group had no specific knowledge about mental retardation. An item analysis was performed using the LERTAP (Nelson, 1974) computer program. Items which did not have point-biserial correlations greater than 0.2 or which did not discriminate between the two groups with point-biserial correlations greater than 0.2 were revised or replaced. The revised test, which was again reviewed by the five judges, is presented in Appendix E.

As it was felt that differences in test scores could have been due to difference in general knowledge rather than specific knowledge about mental retardation, four groups were selected to represented different degrees of both general knowledge and specific knowledge about mental retardation:

a) 32 undergraduate university students with experience and introductory coursework in mental retardation.

b) 22 undergraduate university students with no specific knowledge about mental retardation.

c) 19 adults who had worked more than one year as Sunday school counsellors with retarded people.

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d) 30 first year community college English students with no specific knowledge about mental retardation.

No tests of general knowledge were given; it was assumed that the latter two groups had a lower level of general knowledge.

Subjects were given the 48-item knowledge test with instructions to answer all items. There was no time limit; test time ranged from ten to twenty minutes. There was no correction for guessing applied.

Item analyses were performed using the data from all four groups, again using the LERTAP program. (Those with specific knowledge about mental retardation were assigned an external criterion value of 2, those without specific knowledge were assigned 1.) Hoyt's ANOVA reliability coefficient was determined for each group separately and for the total sample.

A 2 x 2 (specific knowledge by general knowledge) analysis of various (ANOVA) was performed to test the tenability of the following three hypotheses:

1) There are no differences in knowledge test scores among different levels of specific knowledge about mental retardation.

2) There are no differences in knowledge test scores among different levels of general knowledge.

3) The effects of specific knowledge about mental retardation on the knowledge test scores do not change as a function of general knowledge.

Since the cell frequencies in the ANOVA design were disproportionate the two effects were reordered using the Experimental Design

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Method (Woodward and Overall, 1975). Thus each effect is adjusted for the other effect at the same level, and the interaction is adjusted for both of the two lower order effects.

Results

All but two items showed positive point-biserial correlations with the total test scores. Nine items did not discriminate between those with and without specific knowledge about mental retardation, as evidenced by the negative correlations with the external criterion values. (See Appendix E).

The test statistics for each group are presented in Table 6. Hoyt's internal consistency reliability coefficient shows considerable variation, ranging from .83 for the group with higher general and specific knowledge, to .22 for the group with lower general and specific knowledge. Reliability for the total sample is .81.

Table 6

Knowledge about Mental Retardation (M.R.)

Test Statistics

Subjects	N	Mean	Std. Dev'n.	Hoyt's Est. Reliability
With Specific Knowledge about M.R.				
High General Knowledge	32	38.9	5.84	0.83
Low General Knowledge	19	30.6	4.50	0.55
Without Specific Knowledge about M.R.				
High General Knowledge	22	33.4	4.17	0.53
Low General Knowledge	30	27.1	3.54	0.22
Total Sample	103	32.8	6.59	0.81

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The ANOVA results (Table 7) indicate that there are significant differents ($p < .01$) between the two levels specific knowledge about mental retardation and the two levels of general knowledge. The interaction effect is not significant ($p > .25$). These results are shown graphically in Figure 1.

Table 7

Analysis of Variance

Source of Variation	Degrees of Freedom	Mean Sums of Squares	F
Specific Knowledge about Mental Retardation	1	1312.8	60.40**
General Knowledge	1	513.30	23.63**
Interaction of General and Specific Knowledge	1	25.82	1.19
Residual	99	21.72	

** $p < .01$

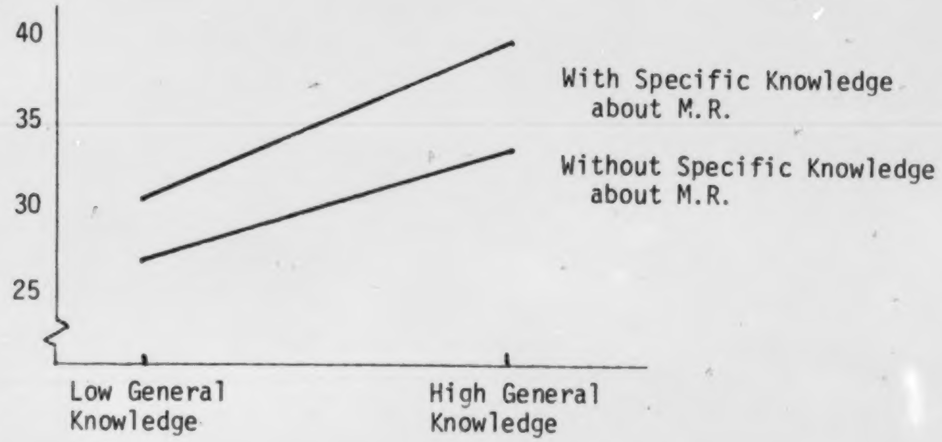

Figure 1. Analysis of interaction for knowledge test developmental study.

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Conclusions

Valididity of the test has been evidenced both by the judgement of the five experts in mental retardation and by the empirical validation using four known groups. Rejection of the first null hypothesis, which pertains to differences among levels of specific knowledge about mental retardation, confirms the requirement that the test discriminates those with and without specific knowledge. Rejection of the second hypothesis shows that the test also contains a component related to overall general knowledge, irrespective of specific knowledge about mental retardation. The failure to reject the third hypothesis shows that general knowledge does not interact with specific knowledge in its effect on the knowledge test scores. Although the general knowledge effect was not desirable for this tests' purposes, the fact that there was no interaction enables the test to be useful for the present study.

Reliability is high for the most knowledgeable group and considerably lower for the less knowledgeable groups. Reliability is particularly low for those with low general knowledge and no specific knowledge about mental retardation. Examining the mean scores relative to the respective reliabilities reveals that low reliability is associated with the difficulty levels of the test relative to the competency of this group. Generally, the test is too difficult for most lay persons, and consequently many people guessed at most of the answers. Since many of the respondents in the present study would have comparable abilities to the two groups with lower general knowledge, it was anticipated that reliability would be relatively low, probably less than .60. However,

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since the test does show good reliability for those with high general and specific knowledge, the test was still used in the present study. It seems that it would be very difficult to construct a test that would accurately reflect the domain of content about mental retardation and still be reliable for a lay population.

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Test of Concerns about a Neighborhood Group Home

In Chapter II the nature of attitude scales was discussed in relation to attitudes toward the mentally retarded. The need for attitude measures addressed to more specific issues and with more specific referents was presented. Further, a need was felt for more specific information regarding community attitudes toward group homes to help developers in their planning. In this section the development study for the test of concerns about a neighborhood group home is presented.

The purpose of this test development study was first to determine what the areas of concern were, and secondly, to develop a measure of these concerns such that the relative importance of these concerns could be ascertained for different groups of people.

Method

Two areas of Vancouver, B.C. were selected for a preliminary study to determine what the main concerns were for people who were anticipating a group home for retarded adults being placed in their neighborhood. The two areas selected were middle to upper-middle class residential areas considered as likely locations for a proposed group home. There were no group homes in these areas at the time of the study. Specific characteristics of these two areas are shown in relation to Vancouver in Tables 8 through 12.

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Table 8

Percentage of Persons at Various Income Levels[a]

Area	Income Levels ($1000's)					
	0	0-5	5-7.5	7.5-10	10-15	>15
Area 1 [b]	17.4	50.9	15.6	8.4	4.8	1.6
Area 2 [b]	16.7	44.5	11.4	8.9	11.1	7.1
Vancouver	15.4	50.4	15.2	9.4	6.0	3.2

Notes. a. Data from 1971 Census of Canada, (Statistics Canada, Income E.A.Tape by Local Area G.V.R.D., Ministry of Supply and Services, 1971)

b. Areas 1 and 2 correspond to census tracts BC039 and BC024 respectively.

Table 9

Number of Occupied Private Dwellings by Tenure

1 Area	Total No. Occupied Private Dwellings	Tenure	
		% Owned	% Rented
Area 1 [a]	3755	38.9	61.1
Area 2 [a]	1765	88.4	11.6
Vancouver [b]	382,045	58.3	41.7

Notes. a. Data from 1976 Census of Canada (Statistics Canada, CTDHMA 23, Ministry of Supply and Services, 1976, fiche 10).

b. Data from 1976 Census of Canada (Statistics Canada, Dwellings and Households, Occupied Private Dwellings by Structural Type and Tenure, Ministry of Supply and Services, 1978).

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Table 10

Mother Tongue

Mother Tongue	% Persons		
	Area 1[a]	Area 2[a]	Vancouver[b]
English	79.3	90.4	79.2
French	1.9	0.8	1.5
Japanese and Chinese	2.0	0.8	3.9
German	3.2	1.6	3.1
Greek	0.4	-	0.3
Italian	0.5	-	1.4
Native Indian	0.1	-	0.1
Netherlands and Flemish	0.5	-	0.9
Polish	0.4	0.8	0.3
Ukranian	1.3	0.8	1.0
Not Stated	4.4	1.6	5.0
Other	6.5	3.2	3.3

Notes. a. Data from 1976 Census of Canada (Statistics Canada, CTDEMA41, Ministry of Supply and Services, 1976, fiche 9).

b. Data from 1976 Census of Canada (Statistics Canada, Population: Demographic Characteristics - Mother Tongue, Ministry of Supply and Services, 1978).

Table 11

Number of Families and No. of Children at Home

Area	Total No. Families	Number of Children at Home (% Families)					
		0	1	2	3	4	5 or more
Area 1[a]	1335	58.8	22.8	11.6	4.1	1.9	0.4
Area 2[a]	1445	31.1	23.2	26.9	12.5	4.8	1.4
Vancouver[b]	96,250	41.4	24.2	19.2	9.6	3.9	1.8

Notes. a. Data from 1976 Census of Canada (Statistics Canada, CTFAMA11, Ministry of Supply and Services, 1976, fiche 4).

b. Data from 1976 Census of Canada (Statistics Canada, Families: by Number of Children, Ministry of Supply and Services, 1978).

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Table 12

Marital Status

Area	Total Population	Marital Status (% Persons)				
		Single	Married	Widowed	Divorced	Separated
Area 1 [a]	7435	47.2	31.7	10.4	5.8	4.9
Area 2 [a]	5505	44.1	47.4	5.5	1.6	1.4
Vancouver [b]		42.8	46.6	5.5	2.6	2.3

Notes. a. Data from 1976 Census of Canada (Statistics Canada, CTDEMA21, Ministry of Supply and Services, 1976, fiche 34).

b. Data from 1976 Census of Canada (Statistics Canada, *Population: Demographic Characteristics - Marital Status,* Ministry of Supply and Services, 1978).

A random sample of ten occupied dwelling units from each area was selected using the sampling procedures of Monroe and Finkner (1959). The head of the household from each occupied dwelling unit was selected for the study. Three persons refused to participate and were replaced by taking an additional sample from the same area.

A graduate student researcher with graduate training in interview techniques conducted an open-ended interview with each of the twenty persons. The interview format used was based on a review of relevant literature and the author's own experience. Responses to the questions were probed when necessary. The format used is specified below:

(Interviewer introduces himself as a graduate researcher from the University of British Columbia).

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Your house was selected as part of a research project and I would like to spend about fifteen minutes to ask you a few questions concerning your feelings about handicapped people and how they live.

In the past few months there has been considerable discussion on T.V. and in the newspapers concerning the feasibility of having mentally retarded people live in the community. I would like to know how you would feel if the local assocation for the mentally retarded had just purchased a house in your neighborhood to use as a group home for five to ten mentally retarded adults. By "mentally retarded" I mean people similar to those who live in an institution for the retarded such as Woodlands Schools. Some of these people have only moderate problems in intelligence while others have more severe problems. Over half of these people can communicate verbally, and can eat and dress with little assistance. Very few have problems in seeing or hearing, and the majority can walk without difficulty.

There are six basic questions we would like to ask of people who live in neighborhoods like yours:

1) If mentally retarded people were living in your community some people would have concerns about the personal safety of their family. How do you feel about this?

2) Other people might worry about the presence of retarded

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people affecting the health of their family. How do you feel about this?

3) Would you expect that retarded people might be a nuisance in your community?

4) If a group home for retarded adults were established in your area how might this affect you financially?

5) If the group home manager were here with me what concerns would you like to discuss regarding the residents or the set-up of the group home?

6) Can you think of any other concerns you might have if a group home were established in your area?

The author then analyzed the content of the responses from all twenty interviews and categorized the concerns expressed into the four main areas outlined in Figure 2. The first three areas involve the effect of the group home's presence on an individual; the fourth area involved an individual's concerns regarding the operation of the group home.

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A. Concerns about retarded affecting personal safety

   1. Physical assault to children
   2. Physical assault to adults
   3. Sexual deviance

B. Concern about retardate being a menace

   1. Attention getting behaviors
   2. Noise
   3. Trespassing

C. Economic concerns

   1. Decline of property value
   2. Damage to their property
   3. Possible law suit

D. Concerns regarding operation of the group home

   1. Supervision of residents
   2. Number of residents
   3. Competence of staff
   4. Amount of communication with group home manager
   5. Right to background information on residents
   6. Sexual composition of the group home
   7. Fertility of the residents
   8. Sexual opportunities of the residents
   9. Reason for neighborhood selection
   10. Right to advanced notification of proposed group home.

Figure 2. Content outline for test of concerns about a neighborhood group home.

This categorization of concerns (Figure 2) was then used as the content domain for the test construction. The content domain was reviewed by five judges. All of the judges were professors at the University of British Columbia; three were experts in the field of mental retardation, two were experts in measurement and education psychology.

Using this content domain a 56-item Likert-type test was developed (see Appendix C). Four items were written to reflect each of

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the concerns in the first three categories above, and two items for each concern in the last category. Thus, the test contains four separate subtests: Personal Safety Concerns (SC), Nuisance Concerns (NC), Economic Concerns (EC), and Home Operation Concerns (HOC). Items were written such that a balance of positive and negative polarity was maintained for each concern. A seven point scale from strongly disagree (-3) to strongly agree (+3) was used. The test was reviewed by the same judges prior to administration.

The test was then administered to 35 first year community college students who were studying introductory psychology and business management. Test time ranged from fifteen to twenty-five minutes.

Results

Means and standard deviations were calculated directly for each subtest and the total test (see Table 14). An item analysis was performed using LERTAP (Nelson, 1974). The scores on all items except 8, 19, 31 and 33 (see Appendix F) correlated positively with the subtest and total test scores. Reliabilities were calculated using Hoyt's ANOVA internal consistency technique for each of the subtests and Cronbach's composite alpha technique for the total composite test.

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Table 13

Test Statistics

Subtest	No. of Items	Mean	Std. Dev'n.	Reliability
I. Personal Safety Concerns	12	57.11	8.08	.76
II. Nuisance Concerns	12	59.94	10.03	.86
III. Economic Concerns	12	57.00	8.61	.73
IV. Home Operation Concerns	20	84.54	12.24	.76
V. Total Test	56	258.60	34.35	.89

Conclusions

A reliable and valid test was constructed which measures a person's concerns about having a group home for retarded adults in their area. Validity of the test was evidenced by constructing the content domain on the basis of responses to an open-ended interview format which allowed people to express a wide variety of possible concerns. Furthermore, the domain and the items were reviewed by five judges who were experts in the field of mental retardation and measurement.

All four subtests had reliabilities in excess of .75. This is particularly high with respect to the relatively small number of items per subtest. Furthermore, it might be anticipated that the community college student group is more homogeneous than the study group with respect to this variable. Thus, reliabilities may be even higher for these tests when used with a more heterogeneous group.

With these results it was concluded that this test was of practical utility for measuring concerns in the present study.

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CHAPTER IV

METHODOLOGY

In Chapter I the problem of the study was presented in the form of three sets of research hypotheses concerning the relationships between knowledge about mental retardation, attitudes toward integration, concerns about a neighborhood group home, and several independent variables. In Chapter II a review of the literature was presented to acquaint the reader with existing studies relevant to this problem. Chapter III outlines the procedures used in developing two of the tests used in the study. In the present chapter the procedures used in conducting the study are described. Sampling procedures are outlined first, followed by data collection and analysis procedures. The last section presents the major assumptions and limitations of the methodology outlined.

Sampling Procedures

Two concentric circles of 1000' and 1400'radius were drawn on a map of the group home area, using the group home as the centre point. These circles formed the boundaries for the distant neighbor regions. The immediate neighbors were identified as those living in houses on the same block as the group home or in those houses behind the group

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home bordering its lots. Sampling units (SU's) of one occupied dwelling unit (ODU) each were then serialled for each of the three regions using the procedures of Monroe and Finkner (1959). The three regions were stratified by blocks and then a simple random sample was drawn for each group based on the sampling rate for that particular region.

A sampling rate of 1.0 was used for all immediate neighbors, and a sampling rate of 0.1 was used for the two larger groups. With these sampling rates 119 ODU's were selected for the study. An additional 20 ODU's were sampled from the distant neighbor group for use in a pilot study.

SU's were randomly designated as being either a male or a female SU. In conducting the study then, a researcher would know in advance whether to request a male or a female from a particular house to participate in the study.

In five cases the person of designated sex was not available, and the interviewers were instructed to interview the available person. For homes in which the occupants could not be contacted after three visits an additional sampling unit was drawn.

Data Collection Procedures

The initial plan for data collection was to send a preliminary letter to all prospective respondents informing them of the study. The letter indicated that a graduate student researcher would request their cooperation in filling out a questionnaire and answering some questions

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in a brief interview. Using this procedure the response rate in the first pilot study of ten respondents was only ten percent. It seemed that the low response rate was due to the fact that the preliminary letter had given people time to prepare for saying "no". A second possible factor was that a male researcher was doing the study and people were more cautious about allowing a male into their home. A second pilot study was thus conducted using a female interviewer without giving prospective respondents the preliminary letter. Response rate was 70 percent for this second pilot study.

As a consequence of these pilot study results female interviewers were used for the entire study. Twelve female graduate students volunteered to be interviewers for the study. All interviewers had some experience in interview procedures and each were given one hour of training in conducting the interview specific to this study.

Each interviewer was assigned ten ODU's randomly selected from the total sample. They were not given any information as to which proximity group the ODU belonged. The author served as research coordinator and chauffeur during data collection. In this way he was available to assist with any problems or questions that arose. Generally, ten interviews could be conducted in an evening.

Data was collected in the following manner:

1) The female interviewer would present herself at the door of a prospective respondent and would state that she was a graduate student from the university conducting a study pertaining to peoples' feelings about handicapped people.

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She would then request the cooperation of the male/female (as previously designated) head of the household to fill out a questionnaite, stating that she could leave the questionnaire with them to be picked up at a later date.

2) If the person agreed the interviewer handed them a questionnaire and allowed them to briefly peruse its format.

3) The interviewer then stated,"While I am here would you mind if I asked you a few general questions which would further assist us in our study?"

4) If the respondent agreed the interviewer then conducted a brief interview. Format for this interview is given in Appendix A.

5) After asking the demographic questions the respondent was then left with the questionnaire which included the tests shown in appendices B, C and D, stapled together in that order.

6) The research coordinator returned three days later to pick up the questionnaire.

This procedure worked very well. Compared to the procedure used during the pilot study, people were more willing to participate in the study. It seemed that once they had committed themselves to the future task of doing the questionnaire, and the questionnaire was in their hand, they more readily consented to taking part in the brief interview.

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Using this procedure, 88 of the 119 people selected agreed to participate, yielding a response rate of 74%. Thirteen of these 88 responses were unusable, either because the respondent did not want to answer all questions in the interview or questionnaire, or because they did not find time to do the questionnaire.

Data Analysis Procedures

To answer the three separate sets of questions the analysis was divided into three parts. The first two sets of questions, as mentioned previously, formed the main thrust of the study and the research design is focussed to answer these questions. The latter set of questions was of secondary interest and utilized less powerful, more exploratory, analysis techniques.

Effects of Proximinity, Contact, and Sex

In this study the effects of proximinity, contact, and sex were treated as fixed effects in a completely randomized factorial design (Kirk, 1968). The six dependent variables were analysed using a 3 x 3 x 2 (proximity-by-contact-by-sex) multivariate analysis of variance (MANOVA).

The three effects were reordered using the Experimental Design Method (Woodward and Overall, 1975) in which all main effects and interactions are adjusted for all other effects at an equal or lower level.

Hypotheses were tested allowing a Type I error probability of .05. In accordance with the conclusions of Hummel and Sligo (1971) the multivariate F test is used as a global criterion for rejection of the primary null hypotheses. Group-mean differences were then determined

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by examining individual univariate F statistics for those cases where the null hypothesis was rejected. Significant univariate F statistics for factors not meeting the global multivariate F criterion were considered to type Type I errors. Finally, for cases in which both the multivariate and univariate criterion were met, differences among levels for a particular factor were examined using Scheffe's procedure (Kirk, 1968).

Relationships among Dependent Variables

Two separate questions were posed in Chapter I pertaining to relationships among the dependent variables. The first question pertained to the rank order of the four concerns about a neighborhood group home. The differences between every possible pair of concern variables were found for each persons. The means of these differences scores were calculated and tested for significance using Hoteling's T^2 test (Le and Tenisci, 1977, p.145).

In doing these calculations the entire sample was used, rather than treating each proximity group separately. Thus, an assumption was made that the difference scores between any two concerns tests did not change as a function of proximity. The tenability of this assumption was ensured by requiring that the hypothesis of no interaction between proximity and concerns tests not be rejected at the .50 level of significance. To analyze this interaction, concerns tests were treated as trials in a 3 x 4 (proximity-by-trials) repeated measures analysis of variance design.

The second question concerned the correlation of the knowledge tests with each of the five affective tests. These hypotheses were treated at a .01 level of significance per experiment. Using the approxi-

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mation formula specified by Kirk (1968, p.85), this yields a .049 level of significance experiment-wise.

Exploratory Analysis of Dependent Variables

The last set of questions posed in Chapter I concerns the effects of several independent variables on the size dependent variables; namely, presence of children, permanence, S.E.E., age, first language, level of education, religion, and religiosity. Each of the variables were analyzed separately as a fixed effect in a one-way ANOVA design, again using multivariate criteria.

Ideally one would like to treat all of the independent variables in the same analysis, but limited sample size necessitated limited the study to analyzing proximity, contact, and sex as well as the relationships among dependent variables as the main focus of the study. It should be appreciated that performing several one-way analyses in this manner creates an inflated Type I error rate (Kirk, 1968, p.82). Using Kirk's formula (1968, p.85), for a .05 TypeI error rate per experiment, with six separate experiments, the experiment-wise error rate is ,34; for .01 it is .077. Therefore, these latter results should be treated in the exploratory manner in which they were intended.

Assumptions and Limitations

Selection Biases

The random selection procedure supports the assumption that respondents selected were representative of neighbors surrounding the group home. However, the sizes of the area frames selected are only

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based on the author's experience, and the area of influence may be lesser or greater than that covered by the three proximity regions. An assumption was made that the distant neighbors are outside the area of influence, and as such will constitute a control group.

It was further assumed that the group home selected is representative of the homes intended by the Community Living Society. This assumption is supported by comparability of clientele in the group home to those who will be deinstitutionalized as well as the comparability of present group home per diem costs to those projected by the Community Living Society.

While there may be several count units (namely, adult persons) per sampling unit, only one count unit per sampling unit was selected. This was done by assuming that there are two adults per house. Where there was more than two adults per house, the head of the household or his/her spouse was selected, depending on whether a male or female respondent was designated. Each unit in a multiple dwelling unit was counted as a separate ODU; there were no apartment blocks in the area. It is assumed that these procedures did not introduce any specific selection biases which prevent generalizing to the entire adult population within a given frame.

In cases where there was no person of the designated sex available, a person of the opposite sex was interviewed. This occurred in only five cases: in four cases a male was not available; in one case a female was not available. It was assumed that any bias introduced by this procedure is negligible.

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Reactive Arrangements

It was assumed that the respondents answered the questions with relative candor, and that they did not give answers in accordance with a perceived expectation because they were chosen for the study. All subjects were interviewed with the same format and no subjects were given any information regarding the purpose of the study. The interviewer's opening statements were designed to ensure the subjects that their responses would be kept anonymous and the data would only be used for informational purposes.

Generalizations from the Study

One cannot treat the results of this study as a true experimental study; since it is only a "static group comparison" (Campbell and Stanley, 1963, p.12). For example, rejection of the null hypotheses concerning attitudes toward integration in favor of the alternative hypothesis does not imply that when a group home is placed in an area attitudes will become more positive (or negative). The differences may have been due to people moving away from a group home area because they had poor attitudes (experimental mortality); or, this particular group home may have been successful because of the presence of neighbors with more favorable attitudes.

A further limitation in the generalization of the study is the fact that there are many different types of group homes and one cannot presume that the attitute pattern for neighbors surrounding this single group home will be generalizable to group homes of different sizes, of different clientele and staff, and in different geographic areas.

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CHAPTER V

RESULTS AND DATA ANALYSIS

In this chapter the results of the study are presented. Following the item and test analysis there are three sections corresponding to the three sets of research questions posed in Chapter I. Discussion of these results and their implications are presented in Chapter VI.

Item and Test Analysis

An item analysis for each of the items on the six tests was performed using the LERTAP computer program (Nelson, 1974). Point-biserial correlations for each item with the total test score were examined for each test.

A positive point-biserial correlation indicates that individuals scoring high on the total test can be expected to do well on that particular item; the item is said to be performing correctly. All but three of the 116 items had positive point-biserials.

The means, standard deviations, reliabilities, and the correlation matrix for the six dependent variables are presented in Table 1. The scores on the 24-item attitudes toward integration test and the 20-item home operation concerns test have been transformed such that they are on the same 12-item metric as the safety, economic, and nuisance concerns test. Reliabilities have been calculated using Hoyt's ANOVA (internal consistency) method.

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Table 14

Test Statistics for Dependent Variables

	Variable					
	K[b]	AI[c]	SC	NC	EC	HOC[d]
Mean [a]	4.60	59.64	55.93	58.47	55.97	51.61
Std. Dev'n.	6.38	9.19	9.38	9.20	7.89	8.59
Reliability	0.34	0.88	0.85	0.85	0.73	0.84

Correlation Matrix

	K	AI	SC	NC	EC	HOC
K	1.000	0.393	0.382	0.314	0.328	0.236
AI	0.393	1.000	0.595	0.642	0.598	0.418
SC	0.382	0.595	1.000	0.866	0.801	0.606
NC	0.314	0.642	0.866	1.000	0.814	0.673
EC	0.328	0.598	0.801	0.814	1.000	0.775
HOC	0.236	0.418	0.606	0.673	0.775	1.000

K = Knowledge about Mental Retardation (Max. Score = 36)

AI = Attitudes toward Integration (Neutral Score = 48)

SC = Safety Concerns (Neutral Score = 48)

NC = Nuisance Concerns (Neutral Score = 48)

EC = Economic Concerns (Neutral Score = 48)

HOC = Home Operation Concerns (Neutral Score = 48)

Notes. [a] Number of cases = 75.

[b] Scores are corrected for guessing.

[c] Raw scores are multiplied by 0.5.

[d] Raw scores are multiplied by 0.6.

The low reliability or the knowledge test warrants discussion. The pilot studies showed that the reliability of this test ranged from

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0.22 for those with low knowledge to 0.83 for those with high knowledge. Reliability of this test for the study sample was 0.77 when correction for guessing was not employed. However, examination of the data showed that 18 of the 75 respondents did not answer all items. Thus, just as incompleted items on a speeded test can create spuriously high reliabilities (Magnusson, 1966), it was deemed necessary to adjust scores using the basic correction formula. Thus the scores reflect the number right minus the number wrong, with omitted items not entering the calculation. The reliability then dropped to 0.34. The low mean score and low reliability is an indication that many respondents were guessing on most of the items.

In contrast, the reliabilities of the attitude toward integration test and the concerns tests were fairly high, especially considering the short test lengths. Although each of the tests embodied three or more different concerns the high reliabilities indicate that within each test each item was measuring the same sort of true score as other items on that test. When the four concerns tests are treated as subtests of a composite concerns test, Cronbach's composite alpha estimate of reliability is 0.92.

Effects of Proximity, Contact, and Sex

The 3 x 3 x 2 (proximinity-by-contact-by-sex) MANOVA was analyzed using the MULTIVARIANCE (Finn, 1972) computer program. Tables 15, 16, and 17 show the means for all levels of each design factor. The corresponding summary MANOVA table is presented in Table 19.

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As shown in Table 18 there were significant proximity and contact effects (p .05), but no sex or interaction effects. The univariate F statistics for the main effects are also shown in Table 5. There are significant group mean differences ($p < .05$) between levels of proximity on the safety, economic, and home operation concerns tests. There were significant group mean differences ($p < .05$) between levels of contact on the safety, nuisance, and economic concerns test as well as the test on knowledge about mental retardation. Group means for each level of these two factors are shown graphically in Figures 3 and 4.

Post hoc comparisons were tested using Scheffe's procedure to determine which contrasts between levels or combinations of levels were significant for the proximity and contact effects. These comparisons yielded the following results (see Table 19):

1) For the proximity effect:
    a. Distant neighbors had significantly more safety, economic, and home operation concerns than the average of the immediate and intermediate neighbors ($p < .05$).
    b. Distant neighbors had significantly more home operation concerns than immediate neighbors ($p < .05$).
2) For the contact effect:
    a. Those with much previous contact with the retarded had significantly more knowledge about mental retardation and fewer safety, nuisance, and economic concerns than those with no previous contact ($p < .05$).

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b. Those with much previous contact had fewer safety and nuisance concerns than the average of those with some contact and no contact ($\underline{p} < .05$).

c. Those with no contact had significantly less knowledge about mental retardation and more safety and economic concerns than the average of those with some contact or much contact ($\underline{p} < .05$).

Table 15

Means for Levels of Proximity

Group	n	K	AI	SC	NC	EC	HOC
Immediate	28	4.54	59.21	57.71	60.54	57.39	54.35
Intermediate	23	4.39	60.96	58.04	59.00	57.52	51.86
Distant	24	4.88	58.88	51.83	55.54	52.83	48.18

Table 16

Means for Levels of Contact

Group	n	K	AI	SC	NC	EC	HOC
No Contact	27	1.85	56.37	52.19	55.74	53.04	50.49
Some Contact	30	5.80	61.68	56.43	58.20	56.60	51.48
Much Contact	18	6.72	61.64	60.72	63.00	59.33	53.50

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Table 17

Means for Levels of Sex

Group	n	K	AI	SC	NC	EC	HOC
Males	35	5.11	59.14	54.94	57.03	54.60	51.07
Females	40	4.15	60.08	56.80	59.73	57.18	52.08

Table 18

Multivariate Analysis of Variance

Source	Multivariate Test F (df)	Univariate df	Univariate F Statistics					
			K	AL	SC	NC	EC	HOC
Proximity (P)	1.96 (12,104)*	2	0.26	0.64	5.22**	3.03	4.61*	4.81*
Contact (C)	2.01 (12,104)*	2	4.75*	2.70	5.91**	4.21*	4.44*	1.42
Sex (S)	0.98 (6,52)	1	1.89	0.07	0.21	0.56	1.33	0.01
P x C	1.22 (24,182.6)	4	0.32	0.40	1.16	1.48	0.70	2.93*
P x S	0.20 (12,104)	1	2.20	2.04	0.34	0.05	1.23	1.98
C x S	1.23 (12,104)	2	0.14	0.55	0.37	1.50	0.80	2.39
P x C x S	0.81 (24,182.6)	4	0.35	0.77	0.52	1.04	1.21	1.37
Residual		57						

* $p < .05$

** $p < .01$

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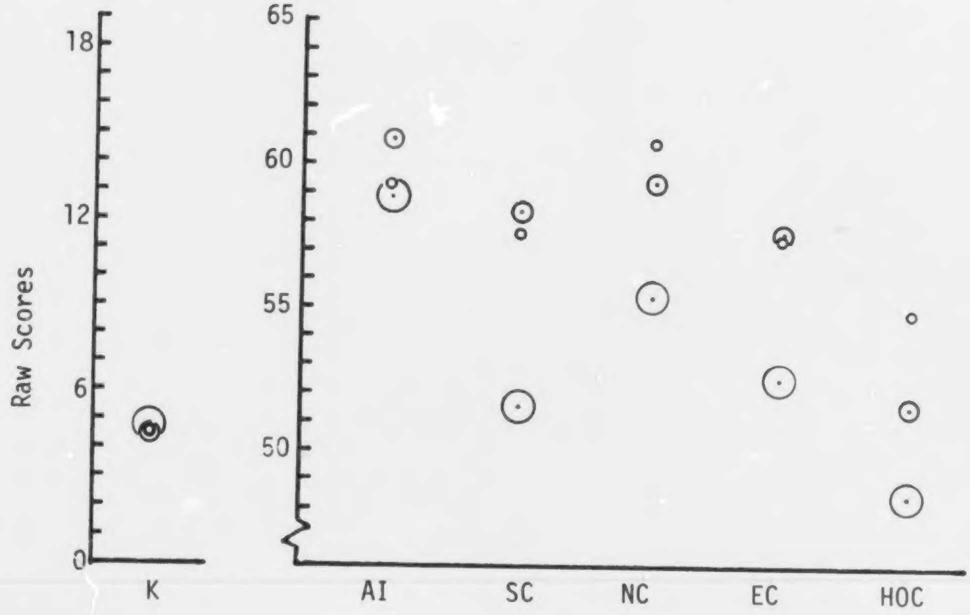

Notes.

○ Immediate Neighbors

⊙ Intermediate Neighbors

⊙ Distant Neighbors

Figure 3. Mean scores on the dependent variables for the three levels of proximity.

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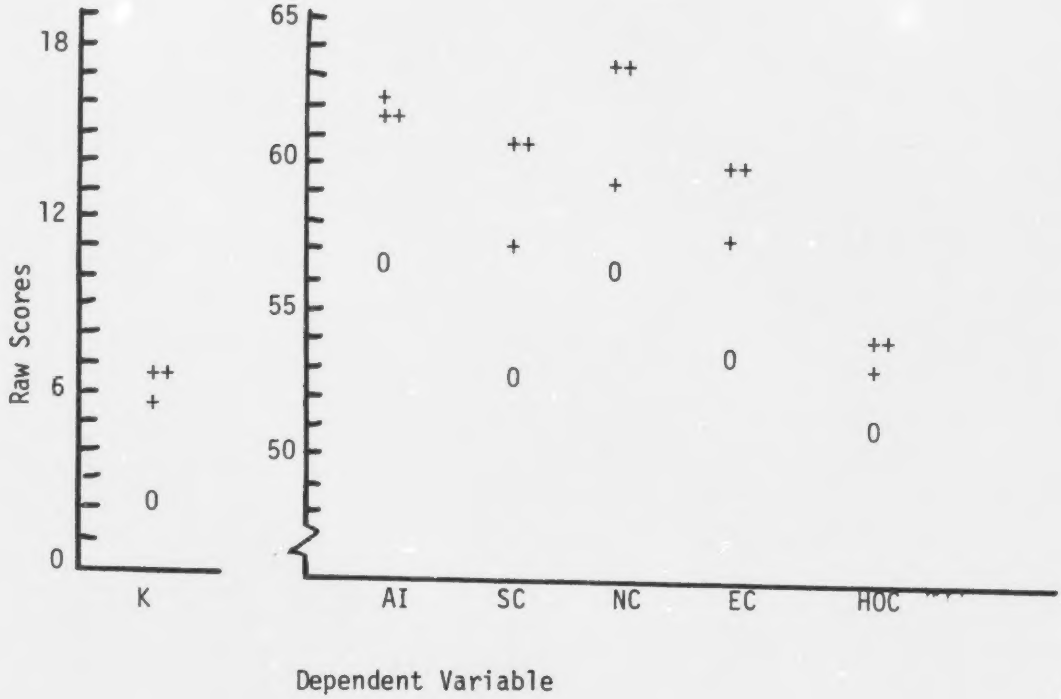

Notes.

0 - No Contact

+ - Some Contact

++ - Much Contact

Figure 4. Mean scores on the dependent variables for the three levels of contact with retarded people.

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Table 19

Post Hoc Comparisons for Proximity Effect

Dependent Variable	Contrast Ψ	Observed Value ψ	Critical Scheffe Value ($p < .05$)
Safety Concerns	$\Psi_1=\mu_{1\cdot\cdot}-\mu_{2\cdot\cdot}$	-0.33	6.13
	$\Psi_2=\mu_{2\cdot\cdot}-\mu_{3\cdot\cdot}$	6.21	6.36
	$\Psi_3=\mu_{1\cdot\cdot}-\mu_{3\cdot\cdot}$	5.88	6.06
	$\Psi_4=\frac{\mu_{1\cdot\cdot}+\mu_{2\cdot\cdot}}{2}-\mu_{3\cdot\cdot}$	6.05*	5.40
	$\Psi_5=\mu_{1\cdot\cdot}-\frac{\mu_{2\cdot\cdot}+\mu_{3\cdot\cdot}}{2}$	2.78	5.20
Economic Concerns	$\Psi_1=\mu_{1\cdot\cdot}-\mu_{2\cdot\cdot}$	-0.13	5.08
	$\Psi_2=\mu_{2\cdot\cdot}-\mu_{3\cdot\cdot}$	4.69	5.27
	$\Psi_3=\mu_{1\cdot\cdot}-\mu_{3\cdot\cdot}$	4.56	5.02
	$\Psi_4=\frac{\mu_{1\cdot\cdot}+\mu_{2\cdot\cdot}}{2}-\mu_3$	4.62*	4.48
	$\Psi_5=\mu_{1\cdot\cdot}-\frac{\mu_{2\cdot\cdot}+\mu_{3\cdot\cdot}}{2}$	2.21	4.31
Home Operation Concerns	$\Psi_1=\mu_{1\cdot\cdot}-\mu_2$	2.48	5.41
	$\Psi_2=\mu_{2\cdot\cdot}-\mu_3$	3.68	5.61
	$\Psi_3=\mu_{1\cdot\cdot}-\mu_{3\cdot\cdot}$	6.16*	5.35
	$\Psi_4=\frac{\mu_{1\cdot\cdot}+\mu_{2\cdot\cdot}}{2}-\mu_3$	4.92*	4.77
	$\Psi_5=\mu_{1\cdot\cdot}-\frac{\mu_{2\cdot\cdot}+\mu_{3\cdot\cdot}}{2}$	4.32	4.59

Notes.

$\mu_{1\cdot\cdot}$ = population mean for immediate neighbors

$\mu_{2\cdot\cdot}$ = population mean for intermediate neighbors

$\mu_{3\cdot\cdot}$ = population mean for distant neighbors

ψ = observed values of Ψ using corresponding sample means

* $p < .05$

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Table 20

Post Hoc Comparisons for Contact Effect

Dependent Variable	Contrast Ψ	Observed Value ψ	Critical Scheffe Value (p <.05)
Knowledge about Mental Retardation	$\Psi_1=\mu_{.1.}-\mu_{.2.}$	-3.95	4.24
	$\Psi_2=\mu_{.2.}-\mu_{.3.}$	-0.92	4.77
	$\Psi_3=\mu_{.1.}-\mu_{.3.}$	-4.87*	4.87
	$\Psi_4=\frac{\mu_{.1.}+\mu_{.2.}}{2}-\mu_{.3.}$	-2.89	4.33
	$\Psi_5=\mu_{.1.}-\frac{\mu_{.2.}+\mu_{.3.}}{2}$	-4.41*	3.89
Safety Concerns	$\Psi_1=\mu_{.1.}-\mu_{.2.}$	-4.24	5.78
	$\Psi_2=\mu_{.2.}-\mu_{.3.}$	-4.29	6.49
	$\Psi_3=\mu_{.1.}-\mu_{.3.}$	-8.53*	6.63
	$\Psi_4=\frac{\mu_{.1.}-\mu_{.2.}}{2}-\mu_{.3.}$	-6.41*	5.89
	$\Psi_5=\mu_{.1.}-\frac{\mu_{.2.}+\mu_{.3.}}{2}$	-6.38*	5.30
Nuisance Concerns	$\Psi_1=\mu_{.1.}-\mu_{.2.}$	-2.46	5.70
	$\Psi_2=\mu_{.2.}-\mu_{.3.}$	-4.80	6.40
	$\Psi_3=\mu_{.1.}-\mu_{.3.}$	-7.26*	6.53
	$\Psi_4=\frac{\mu_{.1.}-\mu_{.2}}{2}.-\mu_{.3.}$	-6.03*	5.81
	$\Psi_5=\mu_{.1.}-\frac{\mu_{.2.}+\mu_{.3.}}{2}$		
Economic Concerns	$\Psi_1=\mu_{.1.}-\mu_{.2.}$	-3.56	4.79
	$\Psi_2=\mu_{.2.}-\mu_{.3.}$	-2.73	5.38
	$\Psi_3=\mu_{.1.}-\mu_{.3.}$	-6.29*	5.50
	$\Psi_4=\frac{\mu_{.1.}-\mu_{.2.}}{2}-\mu_{.3.}$	-4.51	4.89
	$\Psi_5=\mu_{.1.}-\frac{\mu_{.2.}+\mu_{.3.}}{2}$	-4.93*	4.40

Notes.

$\mu_{.1.}$ = population mean for those persons with "no contact"

$\mu_{.2.}$ = population mean for those persons with "some contact"

$\mu_{.3.}$ = population mean for those persons with "much contact"

ψ = observed values of Ψ using corresponding sample means

* $p < .05$

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Relationships among Dependent Variables

In order to rank order the relative importance of the four areas of concern about a neighborhood group home the differences between every possible pair of the four concern variables were calculated. The means of these difference scores are presented in Table 21.

A positive score in a particular cell indicates that the concern of the corresponding column is of greater importance than the concern of the corresponding row. Significance of these differences were tested using Hotelings T^2 test (Le and Tenisci, 1977).

Table 21

Differences among Means for Concerns Tests

Variable	SC	NC	EC	HOC
SC	-	-2.53**	-0.04	4.33**
NC		-	2.49**	6.86**
EC			-	4.37**
HOC				-

**$p < .01$

Home operation concerns was the biggest area of concern; with significant differences between all other concerns ($p < .01$). Safety and Economic concerns both ranked second, with no significant differences between the two. These concerns were significantly more important than Nuisance concerns ($p < .01$). Finally, nuisance concerns were of least

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importance with significant differences between all other concerns ($p < .01$).

As pointed out in Chapter IV, it was necessary to test the tenability of the assumption that this rank order of concerns did not vary as a function of proximity groups, since the calculation has been based on the entire sample. The 3 x 4 (proximity-by-trials) repeated measures ANOVA results are presented in Table 22. It can be seen that although the proximity effect is significant (concurring with the MANOVA results in the previous section) and there are significant differences among concern tests ($p < .01$) there is not a significant interaction between proximity groups and concern tests ($p > .50$). Thus, although the means on each of the concerns tests vary as a function of proximity, the relative difference between any two concerns tests, and thus their rank order, does not change as a function of proximity.

Table 22

Repeated Measures ANOVA Results

Source	df	MS	F
Between Subjects			
Proximity	2	835.54	3.56*
Subjects within Proximity	72	234.81	
Within Subjects			
Concern Tests	3	614.71	31.85**
Proximity by Concern Tests	6	16.14	0.84[a]
Concern Tests by Subjects within Proximity	216	19.30	

* $p < .05$
** $p < .01$
a. tail probability = .543

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The second question pertaining to the relationships among the dependent variables concerned the correlation of knowledge about mental retardation to attitudes toward integration and each of the four concern variables. The following correlations were significant ($p < .01$) (See Table 14):

a) Knowledge and attitudes toward integration: $r = 0.393$
b) Knowledge and safety concerns: $r = 0.382$
c) Knowledge and nuisance concerns: $r = 0.314$
d) Knowledge and economic concerns: $r = 0.328$
e) Knowledge and home operation concerns: $r = 0.236$

Exploratory Analysis

In order to explore possible relationships between the remaining independent variables, each variable was analyzed separately as a fixed effect on the six dependent variables in a one way ANOVA design. Tables 23 to 38 show the means, correlations, multivariate and univariate F test results for each of the independent variables. In accordance with the conclusions of Hummel and Sligo (1971) significant univariate F results cannot be claimed unless the global multivariate F criterion is met.

This exploration showed that first language was the only significant ($p < .05$) variable. Those with English as a first language did significantly better on the knowledge test ($p < .01$), had more favorable attitudes toward integration ($p < .05$), and had fewer personal safety concerns ($p < .05$). The possibility that English ability could have been a factor relevant to this result is discussed in Chapter VI.

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Table 23

Means and Correlations for Levels of Presence of Children

Group	n	Means K	AI	SC	NC	EC	HOC
No Children	21	6.90	61.88	57.19	58.43	55.76	52.14
Children under 12	23	3.43	59.28	55.87	58.00	56.13	51.76
Children over 12	21	3.48	56.62	52.95	56.62	54.67	49.77
Both	10	4.80	62.10	59.70	63.50	58.80	54.00

	Correlations K	AI	SC	NC	EC	HOC
Presence of Children	-0.141	-0.089	-0.019	0.090	0.056	-0.003

Table 24

One Way ANOVA Statistics for Presence of Children

Source	Multivariate F Test F (df)	Dependent Variable	MS	Univariate F Test F (df)
Presence of Children	0.8984 (18,187.16)			
		K	56.57	1.41 (3,71)
		AI	120.19	1.45 (3,71)
		SC	120.59	1.39 (3,71)
		NC	110.02	1.32 (3,71)
		EC	39.09	0.62 (3,71)
		HOC	44.86	0.60 (2,71)

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Table 25

Means and Correlations for Levels of Permanance

Group	n	K	AI	SC	NC	EC	HOC
		Means					
Renters	14	3.86	63.00	57.21	60.14	59.14	56.91
Owners less than 3 years	17	5.12	56.34	56.29	56.88	54.00	50.75
Owners more than 3 years	44	4.64	59.39	55.39	58.55	55.73	50.25

	Correlations					
	K	AI	SC	NC	EC	HOC
Permanence	0.032	-0.083	-0.077	-0.037	-0.120	-0.268

Table 26

One Way ANOVA Statistics for Permanence

Source	Multivariate F Test F (df)	Dependent Variable	MS	Univariate F Test F (df)
Permanence	1.7552 (12 and 134 df)			
		K	6.17	0.15 (2,72)
		AI	150.81	1.82 (2,72)
		SC	19.17	0.21 (2,72)
		NC	41.14	0.48 (2,72)
		EC	104.75	1.71 (2,72)
		HOC	243.88	3.53*(2,72)

*p < .05

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Table 27

Means and Correlations for Levels of S.E.S.

Group	n	K	AI	SC	NC	EC	HOC
		Means					
1 (low SES)	15	5.40	57.73	56.07	59.67	58.07	52.68
2	11	2.27	53.18	51.00	53.64	52.55	47.83
3	20	2.20	61.70	55.55	57.55	55.15	50.40
4	18	7.72	63.50	59.00	61.50	57.33	53.40
5	9	4.44	60.00	58.78	59.67	57.33	54.07
6 (high SES)	2	8.00	52.50	45.50	52.50	49.00	49.20
		Correlations					
		K	AI	SC	NC	EC	HOC
S.E.S.		0.115	0.171	0.097	0.061	-0.022	0.081

Table 28

One Way ANOVA Statistics for S.E.S.

Source	Multivariate F Test F (df)	Dependent Variable	MS	Univariate F Test F (df)
S.E.S.	1.3023 (30 and 258 df)			
		K	76.64	2.01 (5,69)
		AI	193.90	2.53*(5,69)
		SC	146.15	1.74 (5,69)
		NC	108.97	1.32 (5,69)
		EC	71.15	1.15 (5,69)
		HOC	65.34	0.88 (5,69)

*$p < .05$

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Table 29

Means and Correlations for Levels of Age

Group	n	K	AI	SC	NC	EC	HOC
		Means					
Under 25	10	3.80	58.50	53.10	55.60	56.00	53.76
26 to 35	17	2.82	60.76	58.53	61.88	58.53	54.96
36 to 45	28	5.61	60.41	56.43	58.71	56.04	50.85
46 to 55	13	5.08	58.04	52.92	54.92	53.92	47.95
Over 55	7	5.14	58.43	57.29	59.86	53.29	50.23
		Correlations					
		K	AI	SC	NC	EC	HOC
Age		0.111	-0.044	-0.010	-0.035	-0.162	-0.230

Table 30

One Way ANOVA Statistics for Age

Source	Multivariate F Test F (df)	Dependent Variable	MS	Univariate F Test F (df)
Age	0.9230 (24 and 227.97 df)			
		K	23.36	0.56 (4,70)
		AI	23.69	0.27 (4,70)
		SC	83.08	0.94 (4,70)
		NC	114.75	1.38 (4,70)
		EC	54.10	0.86 (4,70)
		HOC	109.88	1.53 (4,70)

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Table 31

Means and Correlations for Levels of First Language

Group	n	Means K	AI	SC	NC	EC	HOC
English	54	5.93	61.30	57.50	59.72	56.89	51.92
Non-English	21	1.19	55.38	51.90	55.24	53.62	50.80
		Correlations K	AI	SC	NC	EC	HOC
First Language		-0.335	-0.291	-0.270	-0.220	-0.187	-0.059

Table 32

One Way ANOVA Statistics for First Language

Source	Multivariate F Test F (df)	Dependent Variable	MS	Univariate F Test F (df)
First Language	2.2942*(6 and 68 df)			
		K	339.06	9.24**(1,73)
		AI	529.07	6.75* (1,73)
		SC	473.36	5.72*
		NC	304.02	3.72 (1,73)
		EC	161.66	2.65 (1,73)
		HOC	19.04	0.26 (1,73)

**$p < .01$

*$p < .05$

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Table 33

Means and Correlations for Levels of Education

		Means					
Group	n	K	AI	SC	NC	EC	HOC
Some High School	27	4.26	57.26	53.56	55.96	54.59	50.04
Completed High School	22	5.18	62.70	57.64	60.55	57.45	53.21
Some College or University	13	5.38	64.62	61.62	64.46	60.46	56.03
Completed University	12	3.17	55.21	52.33	53.67	51.50	46.65

	Correlations					
	K	AI	SC	NC	EC	HOC
Education	-0.042	0.069	0.077	0.036	-0.018	-0.053

Table 34

One Way ANOVA Statistics for Education

Source	Multivariate F Test F (df)	Dependent Variable	MS	Univariate F Test F (df)
Education	0.9882 (18 and 184.33 df)			
		K	14.36	0.34 (3,71)
		AI	304.74	4.17** (3,71)
		SC	263.83	3.24* (3,71)
		NC	335.99	4.48** (3,71)
		EC	200.58	3.50* (3,71)
		HOC	223.53	3.33* (3,71)

**$p < .01$

*$p < .05$

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Table 35

Means for Levels of Religion

Group	n	Means					
		K	AI	SC	NC	EC	HOC
No Religion	10	0.60	58.75	54.20	56.60	54.20	51.00
Catholic	18	5.17	61.64	57.44	59.33	58.56	52.40
Protestant	35	5.57	59.34	55.69	59.00	55.09	50.33
Other	12	4.25	58.25	55.83	57.17	56.17	54.65

Table 36

One Way ANOVA Statistics for Religion

Source	Multivariate F Test F (*df*)	Dependent Variable	MS	Univariate F Test F (*df*)
Religion	1.1332 (18 and 187.16 *df*)			
		K	66.76	1.68 (3,71)
		AI	35.37	0.41 (3,71)
		SC	24.47	0.27 (3,71)
		NC	26.[illegible]	0.30 (3,71)
		EC	59.83	0.96 (3,71)
		HOC	61.02	0.82 (3,71)

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Table 37

Means and Correlations for Levels of Religiosity

Group	n	K	AI	SC	NC	EC	HOC
		Means					
Strongly Active	24	4.92	60.72	56.17	60.92	56.79	51.80
Identifies	25	5.40	60.72	55.96	57.32	55.84	50.86
Does Not Identify	26	3.54	57.60	55.69	57.31	55.35	52.15
		Correlations					
		K	AI	SC	NC	EC	HOC
Religiosity		-0.091	-0.142	-0.021	-0.159	-0.075	-0.018

Table 38

One Way ANOVA Statistics for Religiosity

Source	Multivariate F Test F (df)	Dependent Variable	MS	Univariate F Test F (df)
Religiosity	1.1751 (12 and 134 df)			
		K	23.85	0.58 (2,72)
		AI	83.12	0.98 (2,72)
		SC	1.42	0.02 (2,72)
		NC	105.93	1.26 (2,72)
		EC	13.37	0.21 (2,72)
		HOC	11.38	0.15 (2,72)

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CHAPTER VI

SUMMARY AND CONCLUSIONS

Summary of the Study

With the advent of the normalization principle in North America there has been a strong trend to provide community-based residential facilities for the mentally retarded (Gottlieb, 1975). Agencies directing their energies toward developing small 'group homes' within the community have found that it is not an easy task; invariably their efforts are met with resistance by the local residents (Berdianski and Parker, 1976).

In developing strategies to meet this resistance, several questions arise. First, what are the public concerns about having retarded people living in the neighborhood, and which of these concerns are most important? Does contact with retarded people create a more favorable attitude toward integration and help to alleviate these concerns; and if so, do people who have lived close to a group home for some time have fewer concerns? Is factual knowledge about mental retardation related to these attitudes?

Finally, can one draw a profile of a "good neighbor"? In other words, are there certain characteristics, such as age, socio-economic

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status, or level of education, which are related to more positive attitudes.

A historical review indicated that since the mid-nineteenth century the development of residential facilities have followed several deviancy-based models. Misconceptions and fears, unfounded by scientific knowledge, still underlie the attitudes of many people. Recent studies of these attitudes have yielded inconsistent results, not clearly demonstrating whether or not contact with the retarded produces more favorable attitudes. It appears that most of these studies were too generalized and lacked a specific referent.

With an attempt to avoid these problems and answer some of the important questions posed above, the open-ended responses of twenty people from two areas of Vancouver, B.C. were analyzed to develop a Likert-type attitude test which could measure the extent of four separate areas of concern which people have when a group home for retarded adults was placed in their area. A second test of factual knowledge about mental retardation was developed, and these two tests, together with a test of attitudes toward integration, were administered to a random sample of 75 adults living in the vicinity of a community based residential facility housing thirty-six retarded adults. Respondents were blocked according to their sex and their proximity to the group home. A brief interview was conducted with all respondents to determine their previous contact with retarded people, the number of children in their home, their permanence of residence, socio-economic status, age, first language, level of education, religion, and religiosity.

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Analysis was directed to testing three sets of hypotheses. The first set of hypotheses concerned the effects of proximity, contact, and sex on knowledge about mental retardation, attitudes toward integration, and the four concerns variables. The second set of hypotheses concerned the rank order of the four concerns variables and the correlations of knowledge about mental retardation to attitudes toward integration and the four concerns variables. The last set of hypotheses concerned the effects of socio-economic status, age, level of education, number of children in the home, permanence of residence, first language, religion, and religiosity on knowledge about mental retardation, attitudes toward integration, and the four concerns variables. The results of this analysis are summarized below.

Conclusions of the Study

Within the limitations of the study presented in Chapter IV the following conclusions were made:

Proximity Effect

1) People who live more than 1000 feet from a group home have more safety, economic, and home operation concerns than the average of those living on the same block as the group home and those living within 1000 feet of the group home.

2) People who live on the same block as a group home have fewer concerns related to group home operation than people living further than 1000 feet from the group home.

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3) Proximity to a group home does not have a significant effect one one's knowledge about mental retardation, their attitude toward integration, or their concerns about the retardate being a nuisance in the neighborhood.

Contact Effect

1) People who have had considerable previous contact with the retarded; for example, an immediate relative or an acquaintance with whom they were in contact more than once per month, have more knowledge about mental retardation and have fewer safety, nuisance, and economic concerns than those with no previous contact. Their concerns about safety and nuisance issues are also less than the average of those with only occasional contact and those with no contact.

2) People who have had no previous contact with the retarded have less knowledge about mental retardation and have more safety and economic concerns than the average of those with considerable contact and occasional contact.

3) Contact with the retarded does not have an effect on attitudes toward integration or concerns about home operation.

Sex Effect

1) Males do not differ from females in their knowledge about mental retardation, their attitude toward integration, or their concerns about a neighborhood group home.

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Rank Order of Concerns Variables

The four areas of concern about a neighborhood group home are ordered as follows:

I Home Operation Concerns (area of greatest concern)
II Safety Concerns
Economic Concerns
III Nuisance Concerns (area of least concern)

Relationship to Knowledge about Mental Retardation

Knowledge about mental retardation is correlated to attitudes toward integration and all four of the concerns variables. Those with more knowledge tend to have more favorable attitudes toward integration and have fewer concerns about a neighborhood group home.

Profile of a "good neighbor"

It does not appear possible to draw a profile of a good neighbor; that is, to determine specific characteristics of a neighbor which are related to more positive attitudes. The number of children people have in their home, their permanence of residence, their socio-economic status, their age, their level of education, their religion, or their religiosity does not have an effect on their knowledge about mental retardation, their attitude toward integration, or their concerns about a neighborhood group home.

People with English as a first language may have more knowledge about mental retardation, more favorable attitudes toward integration, and fewer safety concerns, but there are some important cautions pertaining to this result which are discussed below.

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Discussion of the Results

Effects of Proximity

The relationship of proximity to the degree of concern about a neighborhood group home is indeed the most interesting result of the study. First, it was not clear, *a priori*, whether a proximity effect could be shown. Proximity is a very subtle kind of contact; although people are aware of the residents, it is unlikely that most neighbors would have anything more than an occasional brief encounter with them. Attitude studies with an even more direct form of contact have failed to demonstrate a clear "contact effect" (Harth, 1976).

Second, if proximity did have an effect on the degree of concerns, it was not clear whether the effect would be positive or negative. Initially, people who live close to this group home had rallied together in public meetings to oppose the home's induction. Certainly if there had been any sort of trouble with the residents in the past three years, concerns about the group home would be much greater.

Thus, it was exciting to observe that people who live close to the group home had fewer concerns than those who have not had this experience.

There are many limitations in generalizing this result to other group homes in other areas. Results may be dependent on the type of group home considered, its size, or its management policies. However, this study demonstrates that it is possible for even a large group home of retarded adults to have a positive influence on its neighbors, positive in the sense that some of the unfounded concerns about retarded neighbors are alleviated.

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A further result of interest is that this effect is not limited to the most immediate neighbors. People as far as two to three blocks from the home showed fewer concerns.

The Contact Effect

The type of contact measured in this study is very direct and has occurred over a long period of time. Many researchers examining the contact effect have unsuccessfully tried certain forms of "social contact" to produce attitude change (Strauch, 1970). Chennault (1970) showed greater success using a more direct form of contact by having unpopular children participate in cooperative group activities with more popular children. In general there is support "for the notion that the more direct the procedure the greater the probability for producing attitude change" (Harth, 1977, p.12). Contact in this study did not refer a certain type of intervention; rather, it referred to the degree of a person's actual experience with retarded people over a long period of time. Thus, one would expect that there would be a significant contact effect in this study.

The results did show that this type of contact had significant effect on a person's degree of concern about a neighborhood group home, but not on their attitudes toward integration. People who have had considerable previous contact with retarded people have more knowledge about mental retardation and have a more realistic picture of the safety, economic, and nuisance concerns that a retarded person might present. However, it is interesting to note that their attitudes toward integration were no different than those with no previous contact.

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There are two speculations worth considering regarding this null result.

First, the author has seen considerable disjuncture among teachers and parents of the retarded in their attitudes toward integration. While some are actively involved in developing integrated programs and facilities, others are more reserved, believing that the retarded person needs protection from the pressures of society. This attitude of "benevolent" protection (Wolfensberger, 1972, p.20) was seen in the recent demonstration at Jericho Hill School for the Deaf in Vancouver, B.C. where parents rallied to oppose the provincial government's plan for decentralization of the school (Note 4). Thus, one should not assume that contact with the retarded will produce a more favorable attitude toward integration; contact may only serve to entrench a person in the role of benevolent protector.

Second, in the discussion of normalization ideology in Chapter II, it was suggested that acquiring the full awareness of this ideology is not a linear process; rather, this change occurs as a marked "raising of consciousness." Unless the nature of contact is such that one meets the retarded person as an equal then this change may not occur. Some types of contact will cause certain cognitive components of attitude to change, while the more important affective and behavioral components remain unchanged.

These two speculations were further supported by the null results of contact in its effect on home operation concerns. This area of concern included such issues as the competence of the staff, the amount of supervision given, and the sexual opportunities of the residents. Such issues are aligned with the protection model, and thus those with

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considerable previous contact with the retarded did not show differences on this variable compared to those with no contact.

Sex Effect

Although many previous studies have shown that females have more favorable attitudes toward the mentally retarded, the results of the present study did not support these findings. It seems that the same issues regarding group home placement of retarded adults are just as important to men as they are to women.

Rank Order of Concerns

Knowing the rank order of concerns would be useful in establishing a community awareness program, as then the program could focus on the issues of greatest concern. Home operation concerns proved to be the greatest concern in this study. Economic and safety concerns were next, with no significant differences between the two. Nuisance concerns proved to be least important.

In considering the home operation concerns test it would be interesting to examine individually the ten issues embedded within that test. For example, issues such as the right to advance notification, the number of residents placed in the home, and the reason why their neighborhood was selected were the issues of greatest importance in this study, whereas the sex composition of the home and the amount of contact the neighbors have with the group home manager were of least importance. However, there was not enough power in the study to examine each of these issues as a separate dependent variable, and thus conclusions cannot be drawn about the relative rank order of these issues. In a future study, if an orderings of these issues is

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desired, the Unfolded Partial Rank Order procedure of Banta (1961) would be useful; or, if it is desired to examine each of these issues in thorough detail, a Gutman (1944) scale would be advised.

One might have expected that those with small children would have had more safety concerns that those with no children. Similarly, one might have expected home owners to have greater economic concerns than renters. Although age has been a significant factor in other attitude studies, it was not a factor in determining attitude toward integration or the degree of concern about a neighborhood group home. In interpreting these results one must remember that the main focus of the study was not directed toward analyzing these variables; it could be that true differences do exist, but there was not enough power in this study to detect these differences.

Relationships to Knowledge about Mental Retardation

The high correlation of knowledge about mental retardation to attitudes toward integration and to concerns about a neighborhood group home suggests that this may be an important factor worth considering in attitude and attitude change studies. For example, it may be possible to produce more favorable attitudes by presenting factual information about mental retardation.

Profile of a "Good Neighbor"

The exploratory analysis showed that none of the variables except first language were significant in predicing knowledge about mental retardation, attitudes toward integration, or concerns about a neighborhood group home.

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The exploration did show that people with English as a first language did significantly better on the knowledge test, had more favorable attitudes toward integration, and had fewer personal safety concerns. These differences should not be discounted on the basis of language ability. First, interviewers ensured that those reporting that English was not their first language could read the questionnaire. Second, the concerns test had items with a balance of negative and positive polarities and the variances for the two groups are homogeneous. However, one should remember the caution presented in Chapter IV regarding the high Type I error rate present in this exploratory analysis. It is suffice to conclude that the effect of English as a first language warrants consideration in future attitude studies.

Implications of the Study

In planning group homes developers are always faced with the question of how to meet community resistance. The results of this study have some definite implications which shed light on this issue.

For the Machiavellians, who believe that community resistance can be avoided by keeping plans for a group home confidential and eventually presenting them as a *fait accompli*, the results of this study lend support to their argument. People who have not experienced living near a group home have the greatest concerns, and thus might be more likely to organize campaigns to prevent the group home from being started. On the other hand, those who have experienced living near a group home have fewer concerns. Thus, if a group home is introduced in a neighborhood without advance notification to the neighbors

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the concerns may be abated before resistance is organized. Censure will then probably be centered around the violation of their perceived right to advance notification.

For those wishing to meet community resistance with a public awareness program the study also engenders several implications. Such a program should first address concerns pertaining to the basic issues about the operation of the group home. People want information as to the number of residents that will be in the home, the size of the group home staff, their competence, and the reason that their neighborhood was selected. They feel that they have a right to advance notification about a proposed group home as well as to background information on the residents. While some developers may feel that neighbors do not have a moral right to such information, one must weigh the values of violating the rights of privacy versus the possibilities that presenting such information may create more favorable attitudes, thus facilitating the retarded persons' integration into community life.

The second level of concerns involved safety and economic issues. An awareness program should deal with these issues in a straightforward manner, and help prospective neighbors achieve a realistic perspective. Nuisance concerns were shown to be less important; however, these concerns should also be included as part of the program.

The study did show that factual knowledge about mental retardation is a part of the attitude dimension and should therefore be included as part of a community awareness program.

In presenting such a program to a group of concerned people,

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group home planners might solicit the assistance of people who are already living around an existing group home. These people could present their experiences in living near retarded people and help alleviate some of the concerns.

When contact is considered as an attitude change strategy one must carefully consider the nature of the contact. Minimal contact with the retarded, such as an institution tour, is not likely to change attitudes. Considerable contact over a large period of time is more likely to produce favorable attitudes and less concerns about retarded people living in the community.

The final implication of the study is that it is very difficult to draw a profile of a "good neighbor." For example, there are no conclusions that suggest that people in a high S.E.S. area might have fewer concerns than those in a lower S.E.S. area; or that a younger population would be more accepting. Similarly, there are no conclusions which suggest that people in a certain age grouping, religious group, or at a certain level of education should be the focus audience for a community awareness program.

Suggestions for Further Research

The study has formed the basis for future research in several areas.

First, the results of this study are limited to one type of group home serving one type of client. It would be useful to modify the concerns test to a more generalizable test and determine the attitude structure for the same concerns variables about group homes of

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different types and sizes, serving different types of clients.

The study has shown that knowledge about mental retardation is correlated to attitudes toward integration and concerns about a neighborhood group home. The obvious question is whether attitudes can be changed by merely giving factual information about mental retardation.

The study showed that home operation concerns was the biggest area of concern. A more thorough investigation into the issues embedded within the home operation concerns test is necessary to provide information necessary for more specific group home policy planning.

Finally, and most important, this study has laid the groundwork for the development of a sound community awareness program. The nature and relative importance of several concerns about neighborhood group homes has been determined, with indications as to the type of contact necessary to produce more favorable attitudes. Research can now be directed to developing and testing the efficacy of community awareness programs.

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APPENDIX A

INTERVIEW SCHEDULE USED IN THE STUDY

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ISSUES PERTAINING TO GROUP HOMES FOR MENTALLY RETARDED ADULTS

INTERVIEW SCHEDULE

Introduction at dwelling unit:

> *Hello, I'm ____________ from the special education department at U.B.C. We are conducting a study which pertains to people's feelings about handicapped people. We would like a questionnaire filled out which takes about half an hour to complete. We can pick it up at a later date.*

If the person is not the head of household of designated sex, state:

> *In our study we are seeking the opinions of an equal number of men and women. To ensure that we get an equal number of both we have randomly assigned the houses such that in some houses we would like a man to fill out the questionnaire, and in other houses we would like a woman. In your home we would particularly like to interview a (man/woman).*

If the person of designated sex is available and agrees to participate hand them the questionnaire for a brief perusal. If the person of designated sex is not available, and will not be available at a later time, interview the available person, providing he/she is a head of household.

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Then state:

While I am here I would like to ask you a few general questions which pertain to our study. It will only take a few minutes.

If respondent agrees state:

Before I start I want to assure you that your responses will be kept completely anonymous. Your name and address will not appear on any form or questionnaire.

Our study is concerned with people's feelings about the mentally retarded, and their knowledge about mental retardation. By "mentally retarded" we mean people similar to those who live in an institution such as Woodlands School. Some of these people have only moderate problems in intelligence while others have more severe problems. Over half of these people can communicate verbally and can eat and dress with little assistance. Very few have problems in seeing or hearing and the majority can walk without difficulty.

1. *Have you ever known a person whom you thought was mentally retarded?* . . . . ____

If Yes - *Under what circumstances did you know that person?*

a. a member of the immediate family . . . . ____
b. a relative of yours. . . . . ____
c. someone in the neighborhood. . . . . ____
d. a friend of the family . . . . ____
e. a person at work . . . . ____
f. a casual acquaintance. . . . . ____
g. other (specify) ______________ ____________________ ____

If Yes - *How often would you be in contact with this person?*
(e.g. once per month, once per week, daily)

____________________________________ ____

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2. *Do you have any children living at home with you now?* ______

If Yes - *What are their ages?* . . . . ______

If No - (If appropriate) *Do you anticipate having children in the next three years?* . . . . ______

3. *How long have you lived at this present address?*. . . ______ Yrs.

Do you own this house or are you renting it?. . . . . ______

4. *What kind of work do you usually do?*

Occupation ______________________________ ______
(Probe, if vague - *what did you actually do in that job?)*

What kind of business or industry is it?

Industry ______________________________ ______
(Probe, if vague - *what did this industry actually make?)*

*What are your major duties?*__________________ ______

5. *Would you mind telling me in which of these age brackets you belong?* (Hand card to respondent) . . . . ______

6. *What is your first language?* __________________ ______

If Not English - *Do you feel you can read English well enough to answer a questionnaire written in English?*

If Yes - go to question 7.

If No - *Would you mind looking at the first part of this questionnaire just to see if it would be too difficult for you to understand?*

If too difficult or there is some hesitation say:
I am sorry that we don't have the questionnaire prepared in any other languages. That will be all the information we need. Thank you very much for your cooperation.

7. *How far did you go in school?*

a. elementary school . . . . ______
b. some high school. . . . . ______
c. completed high school . . . . ______
d. some university/college training. . . . . ______
e. completed a university degree . . . . ______

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8. *What was the religious orientation of your family while you were growing up?*

   1. No religion . . . . ____
   2. Catholic. . . . . ____
      a. Roman . . . . ____
      b. Greek . . . . ____
   3. Jewish . . . . ____
      a. Orthodox. . . . . ____
      b. Reform. ____
   4. Protestant. . . . . ____
      a. Anglican. . . . . ____
      b. United . . . . ____
      c. Methodist . . . . ____
      d. Baptist . . . . ____
      e. Christian Scientists. . . . . ____
   5. Other (Specify) ______________________________ ____

9. *To what extent do you still identify yourself as a member of the religous denomination of your family?*

   a. strongly - still active in the church . . . . . ____
   b. still identifies with the religion, but only rarely participates in church activities. . . . ____
   c. has changed religious preference and is:
      i) active in the church. . . . . ____
      ii) not active in the church. . . . . ____
   d. does not identify with any religious group. . . ____

10. Sex (M or F) ____

11. Additional notes and comments:

____ ____

____ ____

____ ____

____ ____

____ ____

Thank you. Now I would like to leave this questionnaire with you. I want to remind you that your responses will be kept completely anonymous. Our Research Coordinator will stop by in a few days to pick it up. Do you have any questions? Thanks again for your cooperation.

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APPENDIX B

TEST ON ATTITUDES TOWARD INTEGRATION

(Part I of the questionnaire used in the study)

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APPENDIX B

PART I - YOUR OPINIONS ABOUT RETARDED ADULTS

In this first section we would like to know whether you agree or disagree with certain statements about mentally retarded adults. By "mentally retarded" we mean people similar to those who live in institutions for the retarded such as Woodlands School. Some of these people have only moderate problems in intelligence while others have more severe problems. Over half of these people can communicate verbally and can eat and dress with little assistance. Very few have problems in seeing or hearing and the majority can walk without difficulty.

Please indicate your opinion on each of the following statements by drawing a circle around the number which corresponds to your level of agreement or disagreement. The best answer is your own personal opinion. We have tried to cover many points of view. You may find yourself agreeing strongly with some statements, disagreeing just as strongly with others, and perhaps uncertain about others. Whether you agree or disagree with any statement you can be sure that many other people feel the same way that you do. There are no right or wrong answers.

Please answer every item. You may circle any of the seven numbers from -3 ro +3; for example, if your opinion is somewhere between agree (+1) and strongly agree (+3) you should circle the +2.

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APPENDIX B

		Strongly Disagree		Disagree		Agree		Strongly Agree
1.	It would be kinder to establish separate communities for retarded adults where they would not feel so out of place.	-3	-2	-1	0	+1	+2	+3
2.	It is unwise to trust a younger child with an older retardate.	-3	-2	-1	0	+1	+2	+3
3.	Once someone is retarded little can be done for him.	-3	-2	-1	0	+1	+2	+3
4.	Mentally retarded adults should live in special institutions where they can be supervised and protected.	-3	-2	-1	0	+1	+2	+3
5.	Retarded adults should live among themselves and everything should be done to help them live happy lives.	-3	-2	-1	0	+1	+2	+3
6.	To be perfectly honest, this world would be a safer place to live in if there were no mentally retarded.	-3	-2	-1	0	+1	+2	+3
7.	Most mentally retarded adults are better off in an institution with others of their own kind.	-3	-2	-1	0	+1	+2	+3
8.	There is a sharp dividing line between "normal" and "mentally retarded"	-3	-2	-1	0	+1	+2	+3
9.	Most of our social problems would be solved if we could somehow get rid of the immoral, crooked, and feeble minded people.	-3	-2	-1	0	+1	+2	+3
10.	Mental retardation often leads to mental illness.	-3	-2	-1	0	+1	+2	+3
11.	You can generally identify a retarded person by his looks.	-3	-2	-1	0	+1	+2	+3
12.	Beautiful children are seldom retarded.	-3	-2	-1	0	+1	+2	+3

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		Strongly Disagree		Disagree		Agree		Strongly Agree
13.	I don't think it is fair to your child to let him play with a mentally retarded child.	-3	-2	-1	0	+1	+2	+3
14.	Mentally retarded people have a right to a public education.	-3	-2	-1	0	+1	+2	+3
15.	I would not want to work in a place that also hired a mentally retarded person.	-3	-2	-1	0	+1	+2	+3
16.	A mentally retarded adult should not expect to participate in activities available in the community.	-3	-2	-1	0	+1	+2	+3
17.	A mentally retarded adult living in my neighborhood would tend to lower the value of my property.	-3	-2	-1	0	+1	+2	+3
18.	Mentally retarded adults never know they're different from other people.	-3	-2	-1	0	+1	+2	+3
19.	Programs for retarded adults are too expensive in relation to what the retarded person gains from them.	-3	-2	-1	0	+1	+2	+3
20.	Most parents of a retarded child can have other "normal" children.	-3	-2	-1	0	+1	+2	+3
21.	Retarded people should be cared for at home.	-3	-2	-1	0	+1	+2	+3
22.	Self-contained workshops are justified for some retarded adults.	-3	-2	-1	0	+1	+2	+3
23.	Retarded adults should be placed in institutions.	-3	-2	-1	0	+1	+2	+3
24.	Retarded people can learn to live normal lives.	-3	-2	-1	0	+1	+2	+3

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APPENDIX C

TEST OF CONCERNS ABOUT NEIGHBORHOOD GROUP HOMES

(Part II of the questionnaire used in the study)

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PART II - YOUR OPINIONS ABOUT GROUP HOMES FOR RETARDED ADULTS

In this section we would like to know what your feelings would be should the government purchase one of the houses on your block for use as a group home. The new residents of this home will be six mentally retarded adults, three men and three women. Three of these people are in their early twenties, two are middle age, and one is over sixty. Their handicaps range from mild retardation to very severe retardation.

Will you please indicate your opinion on each of the following statements by drawing a circle around the number which corresponds to your level of agreement or disagreement. The best answer is your own personal opinion. We have tried to cover many points of view. You may find yourself agreeing strongly with some statements, disagreeing just as strongly with others, and perhaps uncertain about others. Whether you agree or disagree with any statement you can be sure that many other people feel the same way that you do. There are no right or wrong answers.

Please answer every item. You may circle any of the seven numbers from -3 to +3; for example, if your opinion is somewhere between agree (+1) and strongly agree (+3) you should circle the +2.

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APPENDIX C

		Strongly Disagree		Disagree		Agree		Strongly Agree
1.	The value of our home will markedly decrease.	-3	-2	-1	0	+1	+2	+3
2.	I must be cautious not to place myself in a position where I might get legally involved in some situation with a retarded resident.	-3	-2	-1	0	+1	+2	+3
3.	I would be irritated by them staring at me or touching me.	-3	-2	-1	0	+1	+2	+3
4.	The noise level in our neighborhood will noticeably increase.	-3	-2	-1	0	+1	+2	+3
5.	It is unlikely that I would ever have to spend money for legal matters involving retarded residents.	-3	-2	-1	0	+1	+2	+3
6.	A government agency should not feel obliged to tell neighbors ahead of time about a proposed group home.	-3	-2	-1	0	+1	+2	+3
7.	Retarded adults will be kind and gentle neighbors.	-3	-2	-1	0	+1	+2	+3
8.	I would trust that the attendants were capable of looking after the residents' needs.	-3	-2	-1	0	+1	+2	+3
9.	I would be very concerned about how much supervision the residents were receiving.	-3	-2	-1	0	+1	+2	+3
10.	Sooner or later one of the residents will physically harm a child in the neighborhood.	-3	-2	-1	0	+1	+2	+3
11.	Eventually one of the retarded persons will sexually molest someone in our neighborhood.	-3	-2	-1	0	+1	+2	+3

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		Strongly Disagree		Disagree		Agree		Strongly Agree
12.	I would not be concerned about a possible property value decline in our neighborhood.	-3	-2	-1	0	+1	+2	+3
13.	Retarded people should be allowed to have normal sexual relationships.	-3	-2	-1	0	+1	+2	+3
14.	The retarded residents will likely be relatively quiet neighbors.	-3	-2	-1	0	+1	+2	+3
15.	Outsiders will not want to buy property in our neighborhood.	-3	-2	-1	0	+1	+2	+3
16.	I would want to know how much training and experience the group home attendants had.	-3	-2	-1	0	+1	+2	+3
17.	I would certainly hope that the residents were sterilized.	-3	-2	-1	0	+1	+2	+3
18.	Having the group home on our block will not affect me financially.	-3	-2	-1	0	+1	+2	+3
19.	I should be told about a proposed group home during the early planning stages.	-3	-2	-1	0	+1	+2	+3
20.	Retarded adults will respect my personal property and possessions.	-3	-2	-1	0	+1	+2	+3
21.	The personal background of the residents is none of my business.	-3	-2	-1	0	+1	+2	+3
22.	I would have no fears about retarded people invading my privacy.	-3	-2	-1	0	+1	+2	+3
23.	I would not be concerned about the number of residents in the home.	-3	-2	-1	0	+1	+2	+3
24.	Meeting residents on the street will add cheer to my day.	-3	-2	-1	0	+1	+2	+3

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APPENDIX C

		Strongly Disagree		Disagree		Agree		Strongly Agree
25.	I guess our neighborhood would be as good a place for a group home as any other.	-3	-2	-1	0	+1	+2	+3
26.	There will be no problems with the way retarded people express their sexual needs.	-3	-2	-1	0	+1	+2	+3
27.	Retarded people will be repeatedly bothering me with their many questions.	-3	-2	-1	0	+1	+2	+3
28.	I would be pleased to spend time talking with the retarded residents.	-3	-2	-1	0	+1	+2	+3
29.	I would trust a mentally retarded person as a baby-sitter.	-3	-2	-1	0	+1	+2	+3
30.	Some neighbors would wish to employ retarded residents to clean their yard or windows.	-3	-2	-1	0	+1	+2	+3
31.	I would trust that the responsible agency will provide adequate supervision.	-3	-2	-1	0	+1	+2	+3
32.	I would be nervous in interacting with the retarded for fear they might "blow up" at me.	-3	-2	-1	0	+1	+2	+3
33.	I would feel free to contact the group home manager should any concern arise.	-3	-2	-1	0	+1	+2	+3
34.	I'm sure that most interactions with retarded neighbors would be peaceful and relaxed.	-3	-2	-1	0	+1	+2	+3
35.	Children should be warned that the residents might be dangerous.	-3	-2	-1	0	+1	+2	+3
36.	Retarded adults show respect for the rights of others to a quiet environment.	-3	-2	-1	0	+1	+2	+3

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APPENDIX C

		Strongly Disagree		Disagree		Agree		Strongly Agree
37.	With retarded residents around I would be worried that one of them might get hurt on my property.	-3	-2	-1	0	+1	+2	+3
38.	In the long run there will be financial benefits to having retarded people in our neighborhood.	-3	-2	-1	0	+1	+2	+3
39.	It would be safe for children to play near the group home.	-3	-2	-1	0	+1	+2	+3
40.	I would be worried about retarded adults trying to look at me through my bedroom window.	-3	-2	-1	0	+1	+2	+3
41.	I feel I should be told about the capabilities and behavior patterns of the residents.	-3	-2	-1	0	+1	+2	+3
42.	Sterilizing residents would be an injustice.	-3	-2	-1	0	+1	+2	+3
43.	I would likely be bothered by retarded people wandering into my yard.	-3	-2	-1	0	+1	+2	+3
44.	It is good that this group home is made up of both men and women.	-3	-2	-1	0	+1	+2	+3
45.	Eventually someone will be assaulted by a group home resident.	-3	-2	-1	0	+1	+2	+3
46.	I would like a say as to how many residents were placed in the home.	-3	-2	-1	0	+1	+2	+3
47.	I would want to know why our neighborhood was selected for the site of the group home.	-3	-2	-1	0	+1	+2	+3
48.	Strict supervision should be maintained to prevent sexual relationships.	-3	-2	-1	0	+1	+2	+3

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	Strongly Disagree		Disagree		Agree		Strongly Agree
49. With retarded people around there will be more risk of having my things stolen.	-3	-2	-1	0	+1	+2	+3
50. I have no legal concerns about the presence of the group home or its residents.	-3	-2	-1	0	+1	+2	+3
51. I would be concerned that residents may wander into my house uninvited.	-3	-2	-1	0	+1	+2	+3
52. I expect that the sexual behavior of the retarded will be quite normal.	-3	-2	-1	0	+1	+2	+3
53. I would be worried that retarded residents might do damage to my house or yard.	-3	-2	-1	0	+1	+2	+3
54. With the group home on our block we will no longer have a quiet, peaceful neighborhood.	-3	-2	-1	0	+1	+2	+3
55. It would be better if the home were made up of residents who were all the same sex.	-3	-2	-1	0	+1	+2	+3
56. I would like to discuss matters with the group home manager on a regular basis.	-3	-2	-1	0	+1	+2	+3

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APPENDIX D

TEST OF KNOWLEDGE ABOUT MENTAL RETARDATION

(Part III of the questionnaire used in the study)

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PART III - YOUR KNOWLEDGE ABOUT MENTAL RETARDATION

This last section contains 36 statements about mentally retarded adults; some are true statements, others are false. Please indicate whether you think each statement is true or false by placing a capital T or a capital F in the space provided. If you are unsure about the answer to an item please make your best guess. Please answer every item.

1. Most mentally retarded people would also be classified as mentally ill. 1. ____
2. German measles during pregnancy could cause mental retardation. 2. ____
3. Certain types of mental retardation can be prevented by placing the child on a special diet. 3. ____
4. Keeping a retarded person in a Canadian institution usually costs between $200 and $400 per month. 4. ____
5. Very severely retarded people tend to die younger than mildly retarded people. 5. ____
6. More males than females are diagnosed as being mentally retarded. 6. ____
7. Retardation due to RH blood factor incompatability can now be prevented. 7. ____
8. Sheltered workshops are usually economically self-supporting. 8. ____
9. Retarded people are prone to violent behaviors. 9. ____
10. The cause of mental retardation can be determined in about nine of every ten cases. 10. ____

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11. Modern drugs can control the extent of most types of mental retardation. 11. ____

12. Mental retardation is more common among low socio-economic classes. 12. ____

13. About nine of every ten retarded people are recognizable as being retarded by their appearance alone. 13. ____

14. Sharp falls during pregnancy often cause mental retardation. 14. ____

15. Through genetic counselling most types of mental retardation can now be prevented. 15. ____

16. Studies show that retarded people are generally happier than most normal people. 16. ____

17. The incidence of mental retardation in a poorer country, such as India, is at least 5 times that of Canada. 17. ____

18. Retardation is usually recognized before school age. 18. ____

19. The children of retarded adults are usually more intelligent than their parents. 19. ____

20. If the parents' first child is retarded, it is likely that their next child will also be retarded. 20. ____

21. About 20% of all retarded people are classified as "educable"; 80% are classified as trainable. 21. ____

22. Retarded people are more successful in work employment than in school. 22. ____

23. The percentage of retarded people in our society has markedly decreased in the last twenty years. 23. ____

24. Even psychologists cannot say definitely whether some children are retarded or not. 24. ____

25. Most types of mental retardation are passed on from generation to generation. 25. ____

26. Some types of mental retardation can now be detected before the child is even born. 26. ____

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27. Most retarded people have no feelings about their handicap. 27. ____

28. A person considered retarded in an urban society might not be considered retarded in a rural society. 28. ____

29. A person's degree of independence and social responsibility partly determines whether he/she would be diagnosed as being mentally retarded. 29. ____

30. A child's birth weight is a determining factor of mental retardation. 30. ____

31. There are no known types of mental retardation considered contagious (catching). 31. ____

32. A higher percentage of seven year old children than two year old children are considered to be mentally retarded. 32. ____

33. There is little difference between the so-called levels of mental retardation. 33. ____

34. "Environmental influences", such as depressed or non-stimulating living conditions, can cause mental retardation. 34. ____

35. Once a person is retarded, there are no cures to reverse the effect. 35. ____

36. Marriage is of little concern to most retarded adults. 36. ____

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APPENDIX E

ITEM ANALYSIS FOR TEST OF KNOWLEDGE ABOUT MENTAL RETARDATION

(based on the test development study outlined in Chapter III)

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Item	Correct Response	Difficulty Index	Point Biserial Total Test	Point Biserial External Criterion
1. About ¼ to ½% of the people in Canada would be classified as mentally retarded.	F	60.2	.18	.13
2. Most mentally retarded people would also be classified as mentally ill.	F	88.3	.29	.12
3. German measles during pregnancy could cause mental retardation.	T	91.3	.30	.24
4. Certain types of mental retardation can be prevented by placing the child on a special diet.	T	61.2	.49	.39
5. Keeping a retarded person in a Canadian institution usually costs between $200 and $400 per month.	F	53.4	.53	.30
6. Very severely retarded people tend to die younger than mildly retarded people.	T	68.9	.16	.16
7. More males than females are diagnosed as being mentally retarded.	T	50.5	.36	.20
8. About 50% of all retarded people are "mongoloid" (Down's Syndrome)	F	77.7	.29	.16

Item	Correct Response	Difficulty Index	Point Biserial Total Test	Point Biserial External Criterion
9. Mental retardation can be caused by gross brain disease.	T	87.4	.09	-.03
10. Retardation due to RH blood factor incompatability can now be prevented.	T	86.4	.24	.17
11. Sheltered workshops are usually economically self-supporting.	F	41.8	.41	.32
12. Retarded people are prone to violent behaviors.	F	89.3	.33	.15
13. Ethnic and racial groups in our society tend to score lower on intelligence tests.	T	55.3	.48	.30
14. I.Q. scores are no longer used to diagnose mental retardation.	F	60.2	.43	.25
15. The cause of mental retardation can be determined in about nine of every ten cases.	F	59.2	.46	.03
16. Urine and blood tests after a child is born may detect mental retardation, but then little can be done about it.	F	73.8	.28	-.03
17. Modern drugs can control the extent of most types of mental retardation.	F	73.8	.35	.10

Item	Correct Response	Difficulty Index	Point Biserial Total Test	Point Biserial External Criterion
18. About 40 to 50% of all retarded people live in an institution.	F	60.2	.38	.17
19. Mental retardation is more common among low socio-economic classes.	T	38.8	.40	.29
20. About nine of every ten retarded people are recognizable as being retarded by their appearance alone.	F	75.7	.50	.20
21. Sharp falls during pregnancy often cause mental retardation.	F	54.4	.40	.05
22. Through genetic counselling most types of mental retardation can be prevented.	F	61.2	.29	.03
23. Retarded people are more reactive to alcohol than most people.	F	72.8	.22	.08
24. Studies show that retarded people are generally happier than most normal people.	F	56.3	.45	.21
25. The incidence of mental retardation in a poorer country, such as India, is at least 5 times that of Canada.	F	66.0	.26	.05

Item	Correct Response	Difficulty Index	Point Biserial Total Test	Point Biserial External Criterion
26. Retardation is usually recognized before school age.	F	32.0	.56	.32
27. The children of retarded adults are usually more intelligent than their parents.	T	58.3	.23	-.03
28. If the parents' first child is retarded, it is likely their next child will also be retarded.	F	87.4	.18	-.03
29. About 20% of all retarded people are classified as "educable"; 80% are classified as "trainable"	F	40.8	.45	.32
30. Retarded people are more successful in work employment than in school.	T	75.7	-.01	-.12
31. The percentage of retarded people in our society has markedly decreased in the last twenty years.	F	58.3	.47	.09
32. Even psychologists cannot definitely say whether some children are retarded or not.	T	82.5	.33	.10
33. Most types of mental retardation are passed on from generation to generation.	F	75.7	.34	.02

Item	Correct Response	Difficulty Index	Point Biserial Total Test	Point Biserial External Criterion
34. Some types of mental retardation can now be detected before the child is even born.	T	89.3	.26	.28
35. Most retarded children considered "educable" not attend regular classes with normal children.	T	47.6	-.13	-.20
36. Most retarded people have no feelings about their handicap.	F	89.3	.31	.03
37. A person considered retarded in an urban society might not be considered retarded in a rural society.	T	67.0	.35	.28
38. A person's degree of independence and social responsibility partly determines whether he/she would be diagnosed as mentally retarded.	T	75.7	.35	.33
39. "Mongoloid" (Down's Syndrome) children are born more often either to very young parents or to very old parents.	T	69.9	.16	.31
40. A child's birth weight is a determining factor of mental retardation.	T	28.2	.46	.33
41. There are no known types of mental retardation considered contagious (catching).	T	89.3	.20	.09

Item	Correct Response	Difficulty Index	Point Biserial Total Test	Point Biserial External Criterion
42. Parents are less accepting of a mildly retarded child than a severely retarded child.	T	51.5	.29	.15
43. A higher percentage of seven year old children than two year old children are considered to be mentally retarded.	T	70.9	.50	.25
44. There is little difference between the so-called levels of mental retardation.	F	93.2	.26	-.04
45. "Environmental" influences,such as depressed or non-stimulating living conditions can cause mental retardation.	T	65.0	.33	.07
46. If we could sterilize all retarded people we could prevent most retardation.	F	96.1	.08	-.10
47. Once a person is retarded, there are no cures to reverse the effect.	T	52.4	.07	.20
48. Marriage is of little concern to most retarded adults.	F	86.4	.36	-.00

APPENDIX F

ITEM ANALYSIS FOR TEST OF CONCERNS ABOUT A NEIGHBORHOOD GROUP HOME

(based on the test development study outlined in Chapter III)

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APPENDIX F

Subtest 1. Personal Safety Concerns

Item	Polarity	Item Statistics Mean	Item Statistics S.D.	Point Biserial Sub Test	Point Biserial Total Test
39. It would be safe for children to play near the group home	+	4.83	1.44	0.70	0.67
29. I would trust a mentally retarded persons as a baby-sitter.	+	2.74	1.31	0.24	0.37
10. Sooner or later one of the residents will physically harm a child in the neighborhood.	-	5.66	1.06	0.54	0.66
35. Children should be warned that the residents might be dangerous.	-	4.20	1.62	0.31	0.24
7. Retarded adults will be kind and gentle neighbors.	+	4.54	1.01	0.13	0.31
34. I'm sure that most interactions with retarded neighbors would be peaceful and relaxed.	+	5.03	0.99	0.66	0.59
45. Eventually someone will be assaulted by a group home resident.	-	4.00	1.57	0.72	0.66
32. I would be nervous in interacting with the retarded for fear they might "blow up" at me.	-	5.37	1.29	0.65	0.60

Subtest 1. Personal Safety Concerns

Item	Polarity	Item Statistics		Point Biserial	Point Biserial
		Mean	S.D.	Sub Test	Total Test
26. There will be no problems with the way retarded people express their sexual needs.	+	4.06	1.16	0.20	0.30
52. I expect that the sexual behavior of the retarded will be quite normal.	+	4.11	1.28	0.48	0.46
40. I would be worried about retarded adults trying to look at me through my bedroom window.	-	5.29	1.60	0.16	0.27
11. Eventually one of the retarded persons will sexually molest someone in our neighborhood.	-	5.80	1.16	0.51	0.50

APPENDIX F

Subtest 2. Nuisance Concerns

Item		Polarity	Item Statistics		Point Biserial	Point Biserial
			Mean	S.D.	Sub Test	Total Test
28.	I would be pleased to spend time talking with the retarded residents.	+	4.71	1.47	0.68	0.64
24.	Meeting residents on the street will add cheer to my day.	+	4.29	1.47	0.81	0.77
27.	Retarded people will be repeatedly bothering me with their many questions.	-	5.06	1.24	0.42	0.50
3.	I would be irritated by them staring at me or touching me.	-	5.40	1.56	0.47	0.54
14.	The retarded residents will likely be relatively quiet neighbors.	+	5.09	0.92	0.47	0.44
36.	Retarded adults show respect for the rights of others to a quiet environment.	+	4.71	1.05	0.26	0.38
4.	The noise level in our neighborhood will noticeable increase.	-	5.77	1.44	0.55	0.58
54.	With the group home on our block we will no longer have a quiet, peaceful neighborhood.	-	5.26	1.46	0.63	0.65

Subtest 2. Nuisance Concerns

Item		Polarity	Item Statistics Mean	S.D.	Point Biserial Sub Test	Point Biserial Total Test
20.	Retarded adults will respect my personal property and possessions.	+	4.74	1.31	0.55	0.63
22.	I would have no fears about retarded people invading my privacy.	+	4.74	1.42	0.69	0.79
51.	I would be concerned that residents may wander into my house uninvited.	-	5.29	1.47	0.30	0.46
43.	I would likely be bothered by retarded people wandering into my yard.	-	4.89	1.08	0.62	0.68

Subtest 3. Economic Concerns

Item		Polarity	Item Statistics		Point Biserial Sub Test	Point Biserial Total Test
			Mean	S.D.		
38.	In the long run there will be financial benefits to having retarded people in our neighborhood.	+	3.17	1.20	0.45	0.50
12.	I would not be concerned about a possible property value decline in our neighborhood.	+	4.51	2.01	0.19	0.16
15.	Outsiders will not want to buy property in our neighborhood.	-	4.60	1.40	0.63	0.58
12.	I would not be concerned about a possible property value decline in our neighborhood.	-	4.89	1.43	0.63	0.61
30.	Some neighbors would wish to employ retarded residents to clean their yard or windows.	+	5.31	1.10	0.18	0.20
18.	Having the group home on our block will not affect me financially.	+	5.23	1.17	0.74	0.60
53.	I would be worried that retarded residents might do damage to my house or yard.	-	5.09	1.20	0.40	0.77

Subtest 3. Economic Concerns

Item	Polarity	Item Statistics Mean	S.D.	Point Biserial Sub Test	Point Biserial Total Test
49. With retarded people around there will be more risk of having my things stolen.	-	5.31	1.28	0.27	0.45
5. It is unlikely that I would ever have to spend money for legal matters involving retarded residents.	+	5.31	1.45	0.23	0.32
50. I have no legal concerns about the presence of the group home or its residents.	+	4.60	1.56	0.35	0.44
2. I must be cautious not to place myself in a position where I might get legally involved in some situation with a retarded resident.	-	4.63	1.51	0.30	0.26
37. With retarded residents around I would be worried that one of them might get hurt on my property.	-	4.34	1.55	0.25	0.45

Subtest 4. Home Operation Concerns

Item	Polarity	Item Statistics Mean	S.D.	Point Biserial Sub Test	Point Biserial Total Test
31. I would trust that the responsible agency will provide adequate supervision.	+	5.82	0.92	-0.09	0.02
9. I would be very concerned about how much supervision the residents were receiving.	-	2.91	1.40	0.54	0.46
23. I would not be concerned about the number of residents in the home.	+	3.71	1.68	0.56	0.66
46. I would like a say as to how many residents were placed in the home.	-	5.49	1.20	0.42	0.53
8. I would trust that the attendants were capable of looking after the residents' needs.	+	5.74	1.20	-0.02	-0.02
16. I would want to know how much training and experience the group home attendants had.	-	2.86	1.35	0.35	0.30
33. I would feel free to contact the group home manager should any concern arise.	+	5.89	0.99	-0.17	-0.02

Subtest 4. Home Operation Concerns

Item	Polarity	Item Statistics Mean	S.D.	Point Biserial Sub Test	Point Biserial Total Test
56. I would like to discuss matters with the group home manager on a regular basis.	-	4.46	1.48	0.41	0.36
44. It is good that this group home is made up of both men and women.	+	4.43	0.70	0.03	0.08
55. It would be better if the home were made up of residents who were all the same sex.	-	4.69	1.53	0.31	0.34
21. The personal background of the residents is none of my business.	+	5.26	1.34	0.44	0.65
41. I feel I should be told about the capabilities and behavior patterns of the residents.	-	3.26	1.67	0.72	0.71
42. Sterilizing residents would be an injustive.	+	4.89	1.75	0.21	0.27
17. I would certainly hope that the residents were sterilized.	-	4.94	1.70	0.20	0.27
13. Retarded people should be allowed to have normal sexual relationships.	+	4.26	1.69	0.34	0.26

Subtest 4. Home Operation Concerns

Item		Polarity	Item Statistics Mean	S.D.	Point Biserial Sub Test	Point Biserial Total Test
48.	Strict supervision should be maintained to prevent sexual relationships.	-	3.97	1.54	0.55	0.43
25.	I guess our neighborhood would be as good a place for a group home as any other.	+	4.97	1.50	0.46	0.65
47.	I would want to know why our neighborhood was selected for the site of the group home.	-	3.37	1.48	0.54	0.59
6.	A government agency should not feel obliged to tell neighbors ahead of time about a proposed group home.	+	2.49	1.67	0.00	0.28
19.	I should be told about a proposed group home during the early planning stages.	-	2.63	1.22	-0.03	0.17

APPENDIX G

RAW DATA

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APPENDIX G

RAW DATA

Data has been coded according to the criteria outlined in Chapter I. Scores for each respondent are on four separate cards as follows:

Card 1	Interview Data
Cols. 1-3	Identification number
Col. 5	Proximity
Col. 7	Contact
Col. 9	Number of children
Col. 11	Permanence
Cols. 13-15	Blishen Occupation Score
Col. 17	S.E.S. Bracket
Col. 19	Age Bracket
Col. 21	First Language
Col. 23	Level of Education
Col. 25	Religion
Col. 27	Religiosity
Col. 29	Sex
Card 2	Responses to 24 item Attitudes Toward Integration Test
Card 3	Responses to 56 item Concerns Test
Card 4	Responses to 36 item Test of Knowledge about Mental Retardation

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APPENDIX G

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PUBLICATIONS:

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